SECTION SRS

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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PRECAUTIONS

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Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

AHS000QA

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

Precautions for SRS “AIR BAG” and “SEAT BELT PRE-TENSIONER” Service

AHS000QB

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
  For approximately 3 minutes after the cables are removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.
- Diagnosis sensor unit must always be installed with their arrow marks “⇐” pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not attempt to turn steering wheel or column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and place front side air bag module standing with stud bolt side setting bottom.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.

Wiring Diagrams and Trouble Diagnosis

AHS000R4

When you read wiring diagrams, refer to the following:

- GI-14, "How to Read Wiring Diagrams" in GI section
- PG-2, "POWER SUPPLY ROUTING" in PG section

When you perform trouble diagnosis, refer to the following:

- GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES" in GI section
- GI-26, "How to Perform Efficient Diagnosis for an Electrical Incident" in GI section

Check for any service bulletins before servicing the vehicle.

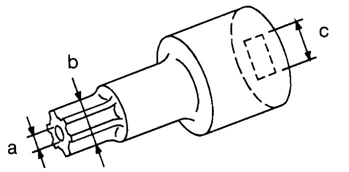
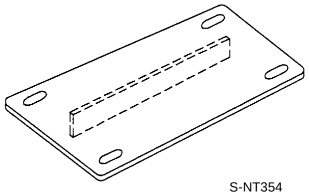
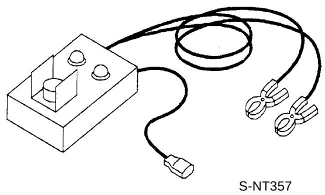
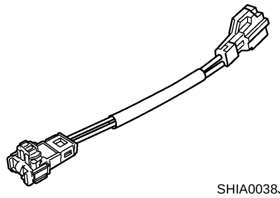
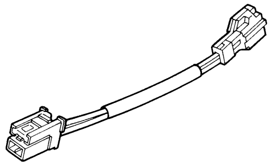
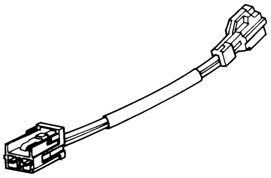
PREPARATION

PFP:00002

Special Service Tools

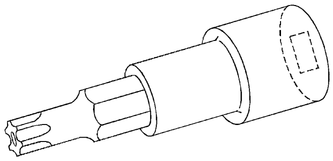
AHS000QD

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
HT61961000 and HT62152000 combined Tamper resistant TORX bit  S-NT361	Size: T50 **a: 3.5 (0.138) dia.** **b: 8.5 - 8.6 (0.335 - 0.339) dia.** **c: approx. 10 (0.39) sq.** Unit: mm (in)
KV99105300 (J-41246) Air bag module bracket  S-NT354	Anchoring air bag module
KV99106400 (J-38381) Deployment tool  S-NT357	Disposing of air bag module and front seat belt pre-tensioner
KV99109700 (—) ● Deployment tool adapter for front seat belt pre-tensioner ● Deployment tool adapter for driver air bag module  SHIA0038J	● Connecting between the deployment tool and front seat belt pre-tensioner ● Connecting between the deployment tool and driver air bag module
KV99109000 (—) Deployment tool adapters for side air bag  ZZA1190D	Connecting between the deployment tool and side air bag module
KV99108300 (J-38381-35) Deployment tool adapters for front passenger air bag  ZZA1166D	Connecting between the deployment tool and front passenger air bag module

Commercial Service Tools

AHS000QE

Tool name		Description
Tamper resistant TORX bit	 S-NT757	Size: T30

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

PFP:28556

SRS Configuration

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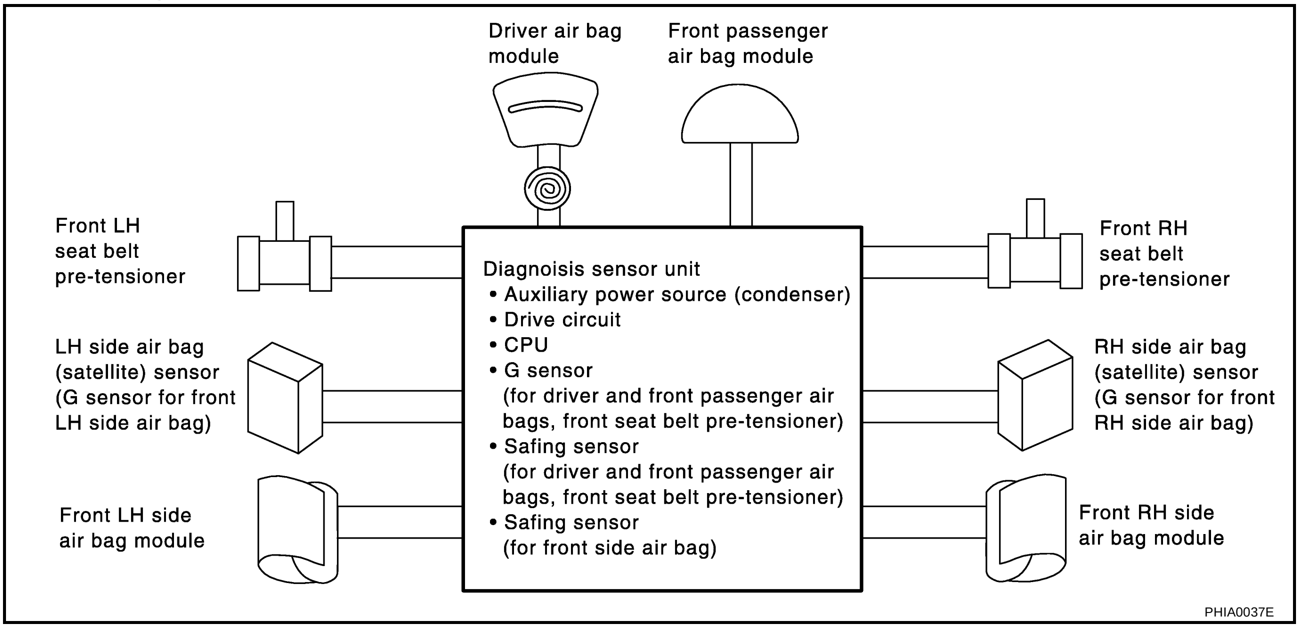


The air bag deploys if the diagnosis sensor unit activates while the ignition switch is in the ON or START position.

The collision modes for which supplemental restraint systems are activated are different among the SRS systems. For example, the driver air bag module and front passenger air bag module are activated in a frontal collision but not in a side collision.

SRS configurations which are activated for some collision modes are as follows;

SRS configuration	Frontal collision	Left side collision	Right side collision
Driver air bag module	×	—	—
Front passenger air bag module	×	—	—
Front LH seat belt pre-tensioner	×	—	—
Front RH seat belt pre-tensioner	×	—	—
Front LH side air bag module	—	×	—
Front RH side air bag module	—	—	×

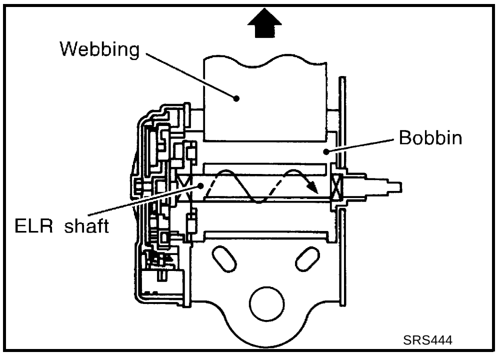
Front Seat Belt Pre-Tensioner with Load Limiter

AHS000QG

The seat belt pre-tensioner system with load limiter is installed to both the driver's seat and the front passenger's seat. It operates simultaneously with the SRS air bag system in the event of a frontal collision with an impact exceeding a specified level.

When the frontal collision with an impact exceeding a specified level occurs, seat belt slack resulting from clothing or other factors is immediately taken up by the pre-tensioner. Vehicle passengers are securely restrained.

When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining force.



Front Side Air Bag

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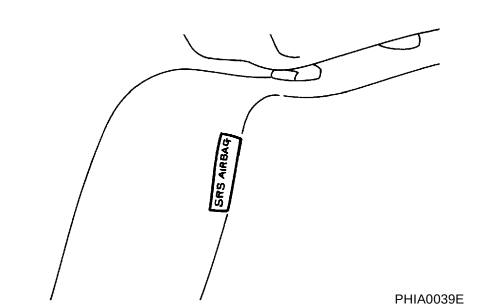
Front side air bag is built-in type.
The front seatbacks with built-in type side air bag have the labels shown in figure at right.

Front seat back with front side air bag



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TROUBLE DIAGNOSIS

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Trouble Diagnosis Introduction

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CAUTION:

- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harness can be identified by yellow and/or orange harnesses or harness connector.**
- **Do not attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.**
- **Keep ground portion clean.**

DIAGNOSIS FUNCTION

The SRS self-diagnosis results can be read by using “AIR BAG” warning lamp and/or CONSULT-II.
The User mode is exclusively prepared for the customer (driver). This mode warns the driver of a system malfunction through the operation of the “AIR BAG” warning lamp.
The Diagnosis mode allows the technician to locate and inspect the malfunctioning part.
The mode applications for the “AIR BAG” warning lamp and CONSULT-II are as follows:

	User mode	Diagnosis mode	Display type
“AIR BAG” warning lamp	X	X	ON-OFF operation
CONSULT-II	—	X	Monitoring

NOTE:
Seat belt pre-tensioner malfunction is indicated by “AIR BAG” warning lamp.

HOW TO PERFORM TROUBLE DIAGNOSES FOR QUICK AND ACCURATE REPAIR

A good understanding of the malfunction conditions can make troubleshooting faster and more accurate.
In general, each customer feels differently about a malfunction. It is important to fully understand the symptoms or conditions for a customer complaint.

Information from Customer

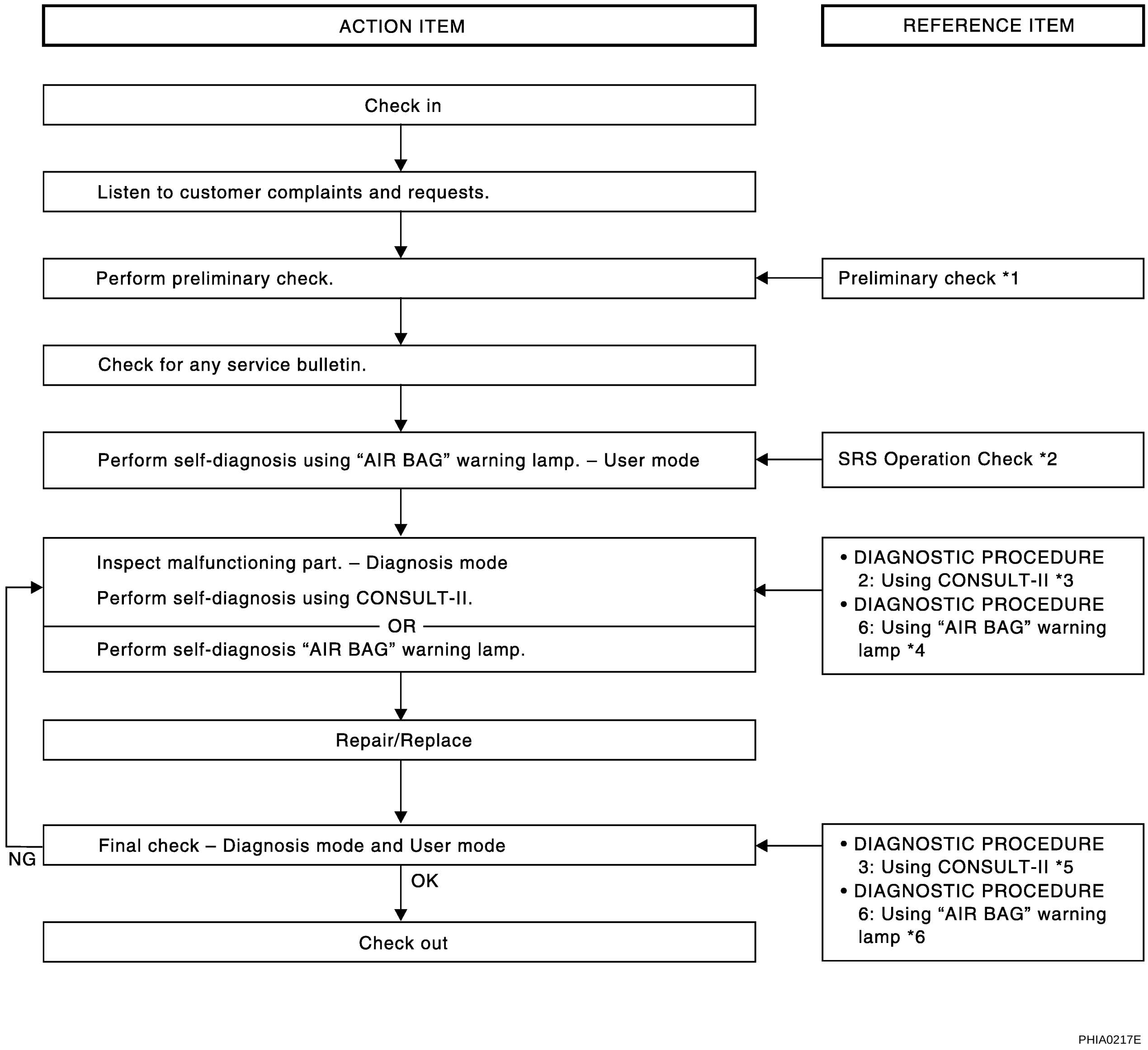
WHAT..... Vehicle model
WHEN..... Date, Frequencies
WHERE..... Road conditions
HOW..... Operating conditions, Symptoms

Preliminary Check

Check that the following parts are in good order.

- Battery (Refer to SC-4, "How to Handle Battery" .)
- Fuse (Refer to SRS-11, "Wiring Diagram — SRS —" .)
- System component-to-harness connections

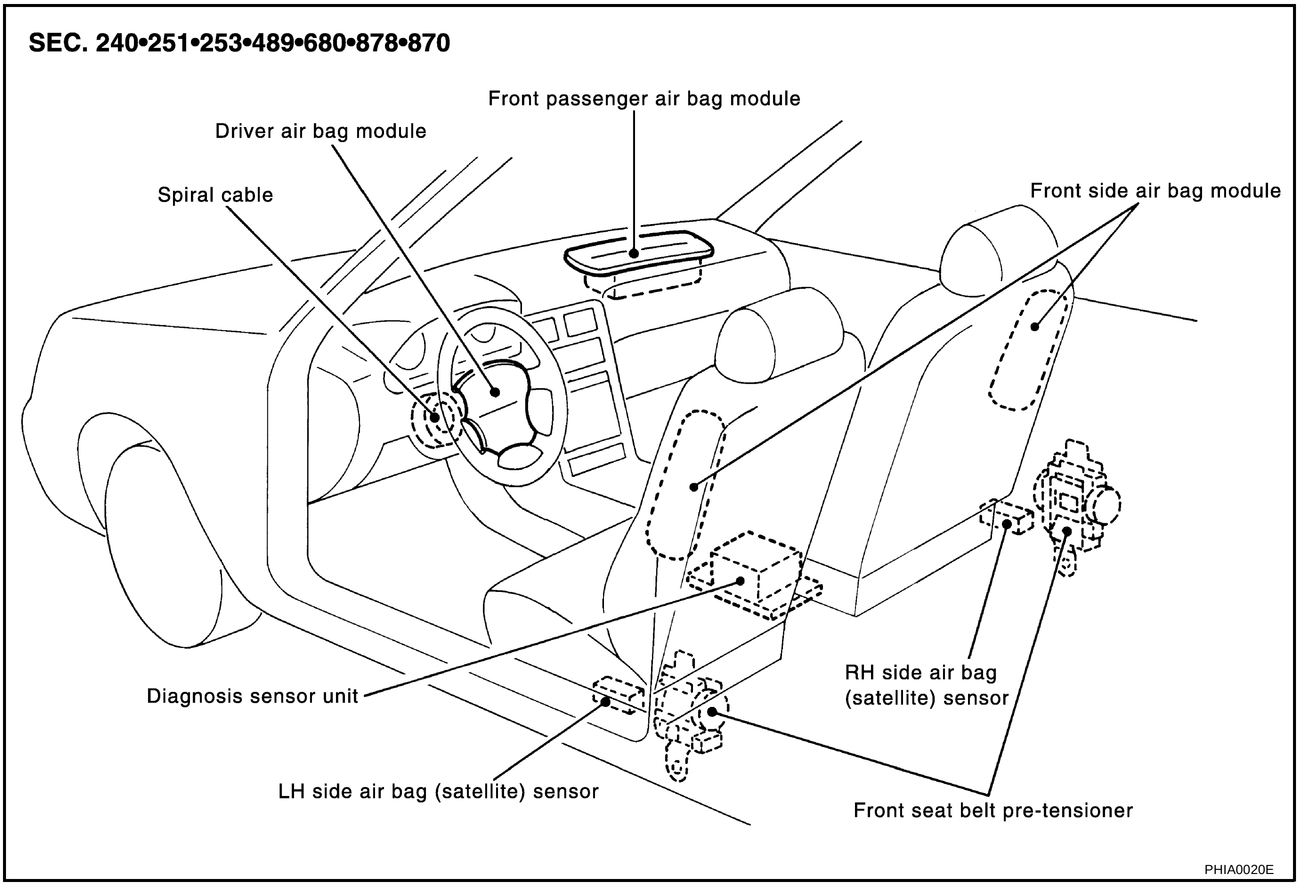
WORK FLOW



*1: SRS-8, "Preliminary Check".
*2: SRS-15, "SRS Operation Check".
*3: SRS-17, "DIAGNOSTIC PROCEDURE 2".
*4: SRS-26, "DIAGNOSTIC PROCEDURE 6".
*5: SRS-21, "DIAGNOSTIC PROCEDURE 3".
*6: SRS-26, "DIAGNOSTIC PROCEDURE 6".

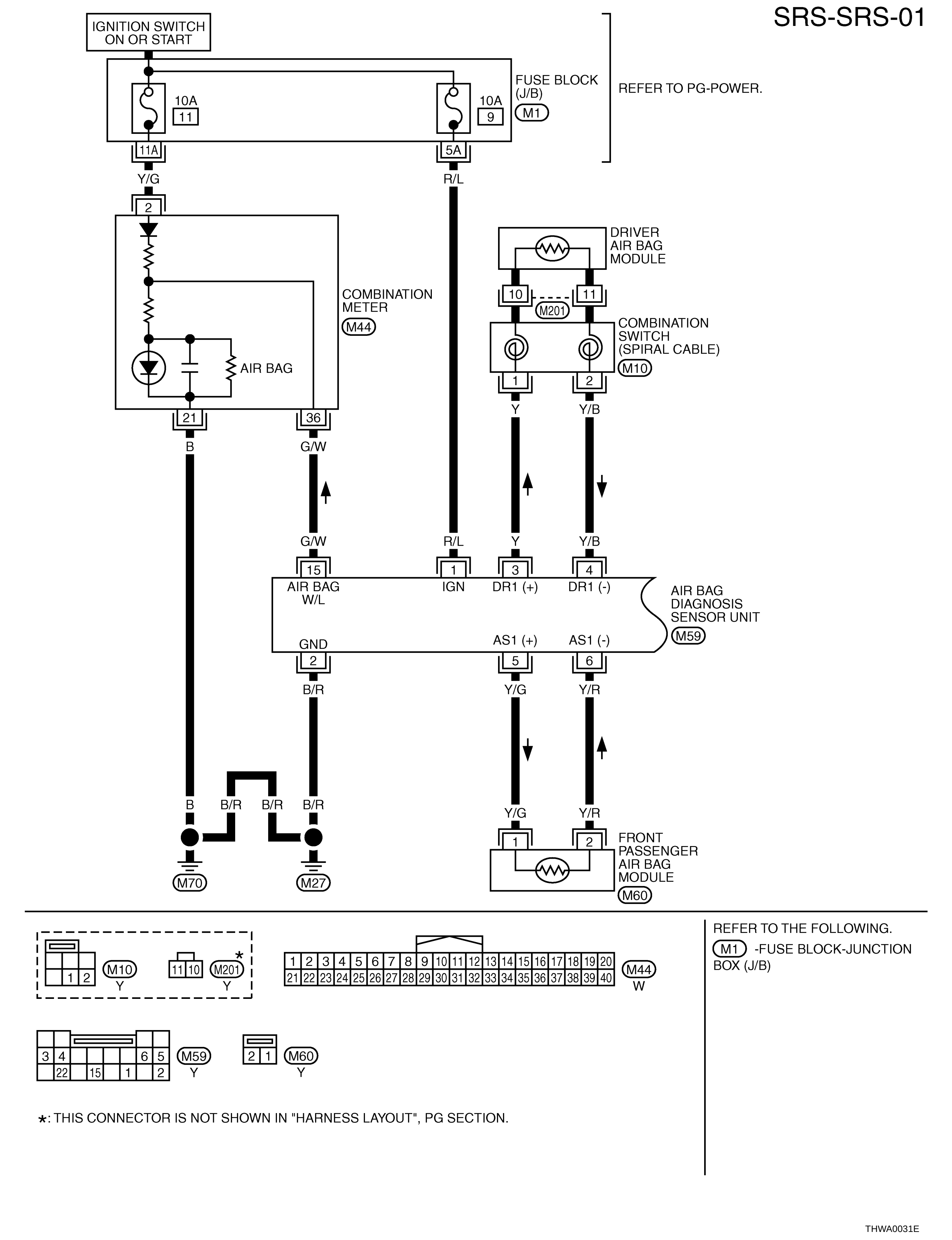
Component Parts Location

AHS000QJ

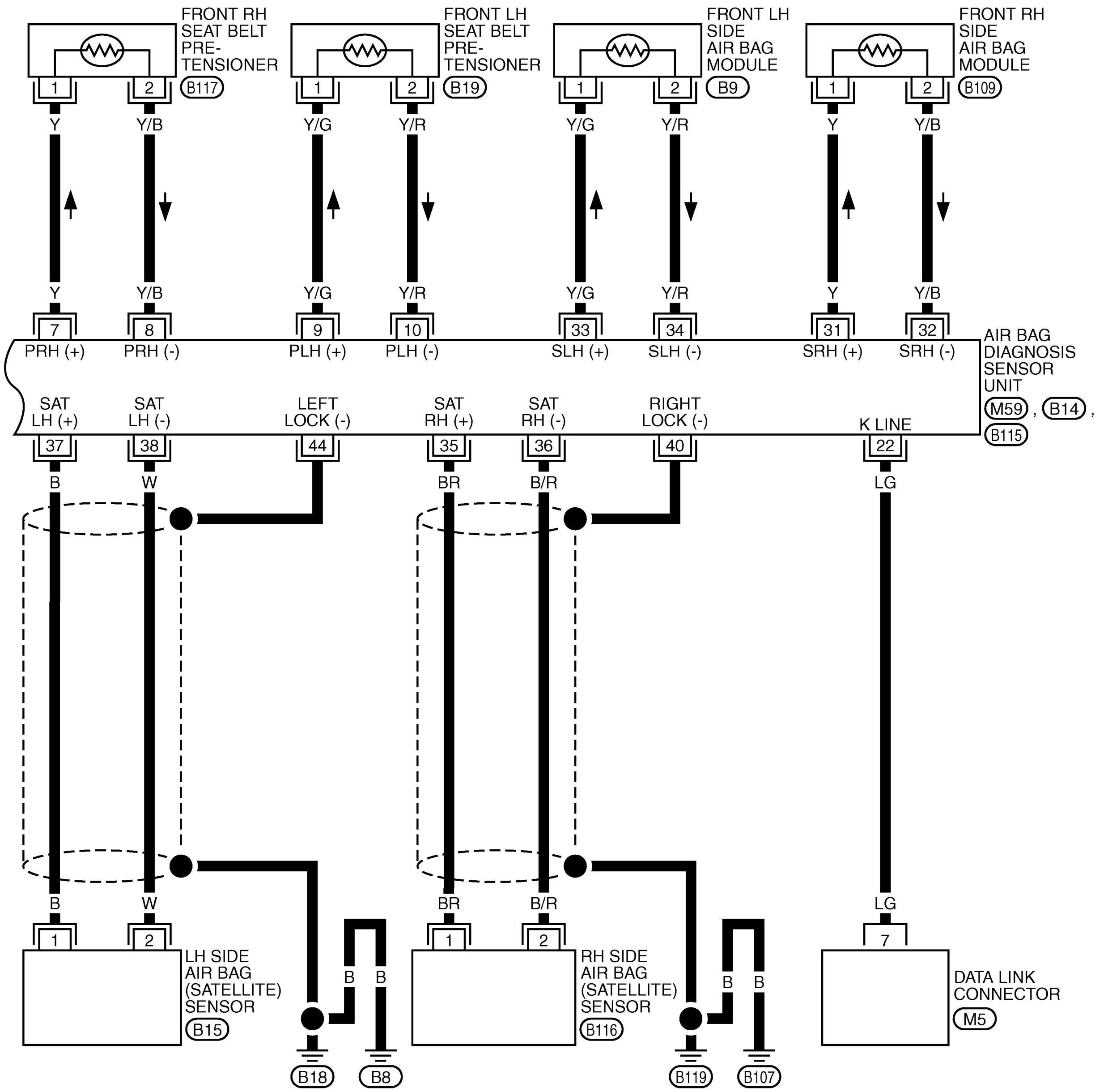


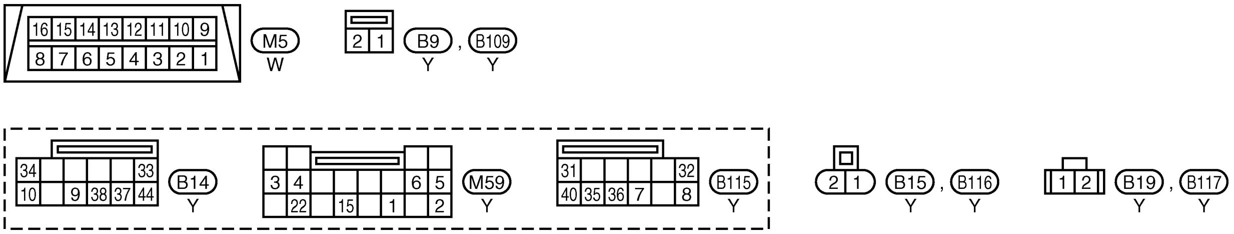
Wiring Diagram — SRS —

AHS000QK



SRS-SRS-02





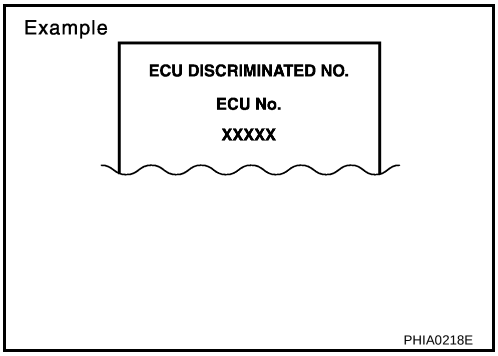
THWA0032E

CONSULT-II Function

AHS000QM

DIAGNOSIS MODE FOR CONSULT-II

- "SELF-DIAG [CURRENT]"
  A current Self-diagnosis result (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-II screen in real time. This refers to a malfunctioning part requiring repairs.
- "SELF-DIAG [PAST]"
  Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results are not erased until memory erasing is executed.
- "TROUBLE DIAG RECORD"
  With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT-II screen.
- "ECU DISCRIMINATED NO."
  The diagnosis sensor unit for each vehicle model is assigned with its own, individual classification number. This number will be displayed on the CONSULT-II screen, as shown. When replacing the diagnosis sensor unit, refer to the part number for the compatibility. After installation, replacement with a correct unit can be checked by confirming this classification number on the CONSULT-II screen.
  After repair, make sure the discriminated number of diagnosis sensor unit installed to vehicle are same. Refer to SRS-42, "ECU DISCRIMINATED NO." .



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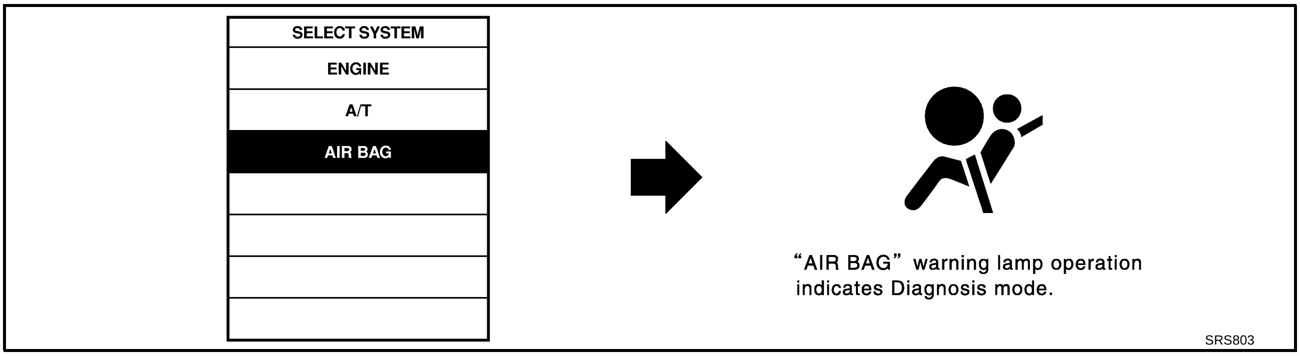
HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

From User Mode to Diagnosis Mode

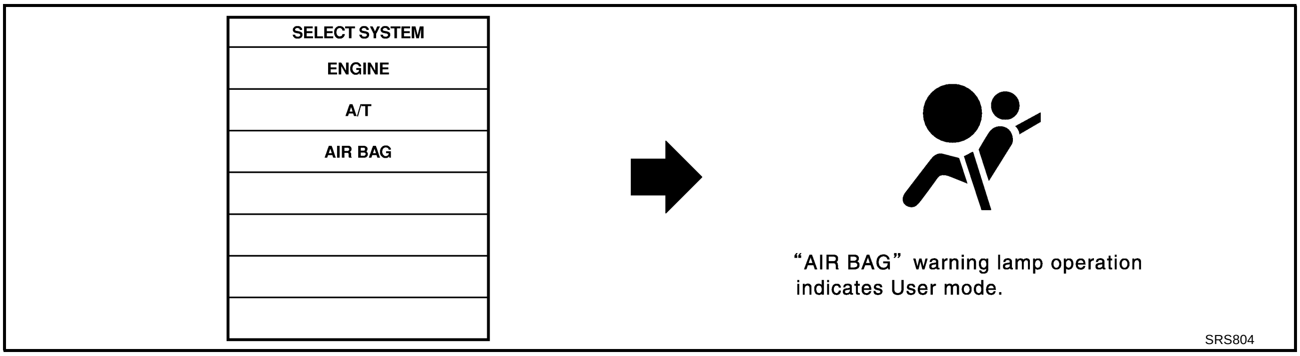
After selecting "AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically changes to Diagnosis mode.



SRS803

From Diagnosis Mode to User Mode

To return to User mode from Diagnosis mode, touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears, then diagnosis mode automatically changes to User mode.

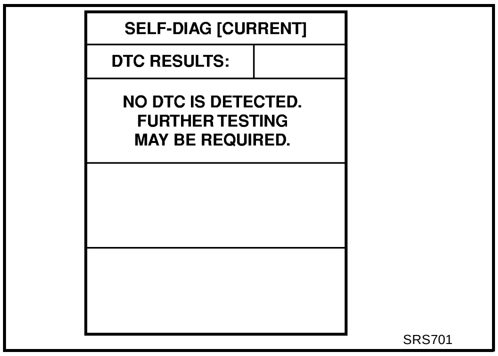


SRS804

HOW TO ERASE SELF-DIAGNOSIS RESULTS

- "SELF-DIAG [CURRENT]"
  A current Self-diagnosis result is displayed on the CONSULT-II screen in real time.
  After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".
- "SELF-DIAG [PAST]"
  Return to the "SELF-DIAG [CURRENT]" CONSULT-II screen by touching "BACK" key of CONSULT-II and select "SELF-DIAG [CURRENT]" in SELECT DIAG MODE. Touch "ERASE" in "SELF-DIAG [CURRENT]" mode.

  NOTE:
  If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.
- "TROUBLE DIAG RECORD"
  The memory of "TROUBLE DIAG RECORD" cannot be erased.



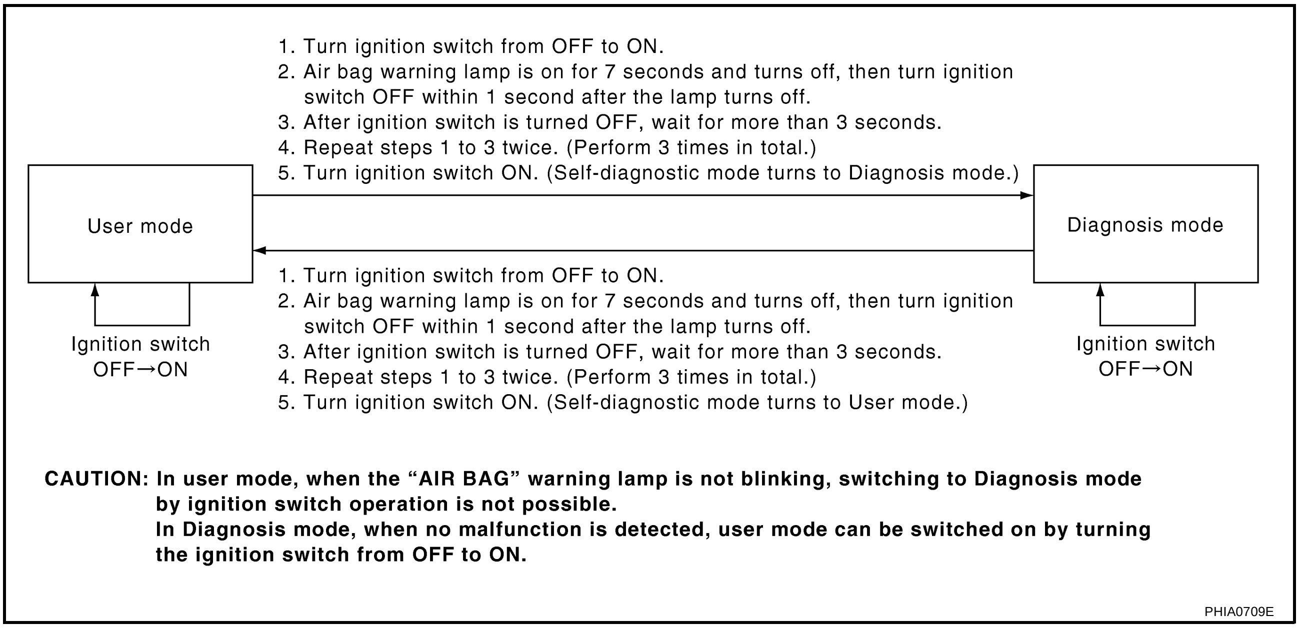
SRS701

Self-Diagnosis Function (Without CONSULT-II)

AHS000QN

- The reading of these results is accomplished "User mode" and "Diagnosis mode".
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II



PHIA0709E

HOW TO ERASE SELF-DIAGNOSIS RESULTS

After a malfunction is repaired, turn the ignition switch OFF for at least one second, then back ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

SRS Operation Check

AHS000QO

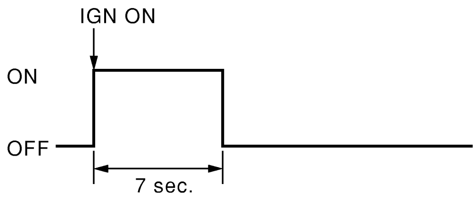
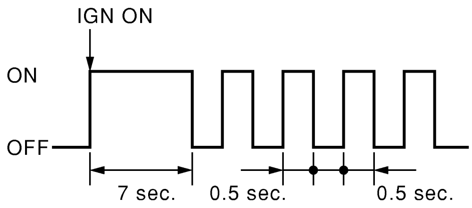
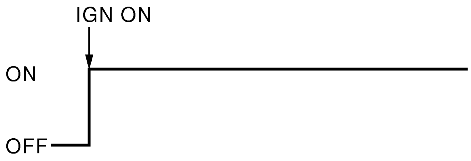
DIAGNOSTIC PROCEDURE 1

Checking Air Bag Operation by Using “AIR BAG” Warning Lamp — User Mode

1. Turn the ignition switch from OFF to ON, and check that the air bag warning lamp blinks.
2. Compare the SRS air bag warning lamp blinking pattern with the examples.

BF-1845D

Warning lamp examples

“AIR BAG” warning lamp operation-User mode-	SRS condition	Reference item
 SHIA0011E	● No malfunction is detected. ● No further action is necessary.	—
 SHIA0012E	● The system is malfunctioning and needs to be repaired as indicated.	Go to SRS-17, "DIAGNOSTIC PROCEDURE 2" or SRS-23, "DIAGNOSTIC PROCEDURE 5" .
 SHIA0013E	● Air bag is deployed. ● Seat belt pre-tensioner is deployed.	Go to SRS-49, "COLLISION DIAGNOSIS" .
	● Diagnosis sensor unit is malfunctioning. ● Air bag power supply circuit is malfunctioning. ● SRS air bag warning lamp circuit is malfunctioning.	Go to SRS-30, "Trouble Diagnosis: “AIR BAG” Warning Lamp Does Not Turn Off" .
SHIA0014E	● Diagnosis sensor unit is malfunctioning. ● Air bag warning lamp circuit is malfunctioning.	Go to SRS-31, "Trouble Diagnosis: “AIR BAG” Warning Lamp Does Not Turn On" .

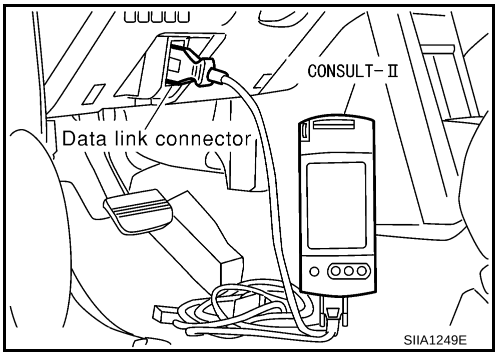
Trouble Diagnosis with CONSULT–II

AHS000QP

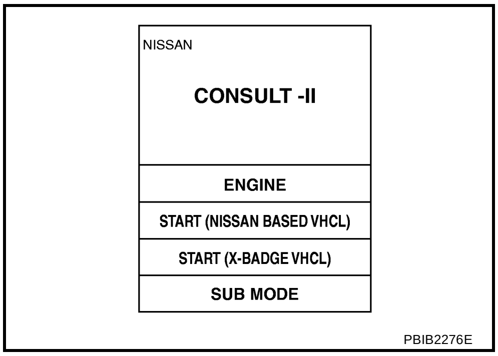
DIAGNOSTIC PROCEDURE 2

Inspecting SRS Malfunctioning Parts by Using CONSULT-II — DIAGNOSIS MODE

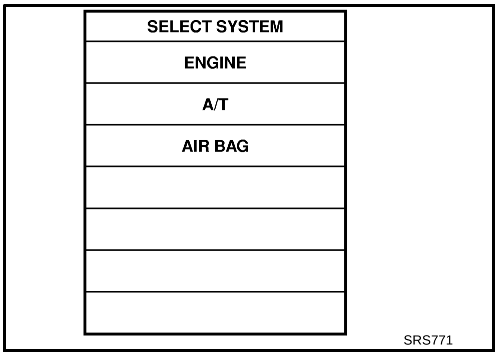
1. Turn ignition switch OFF.
2. Connect CONSULT-II to the data link connector.



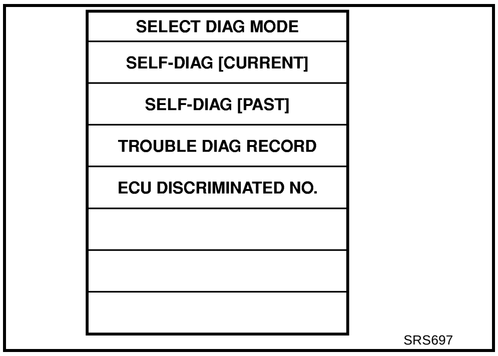
3. Turn ignition switch ON.
4. Touch “START (NISSAN BASED VHCL)”.



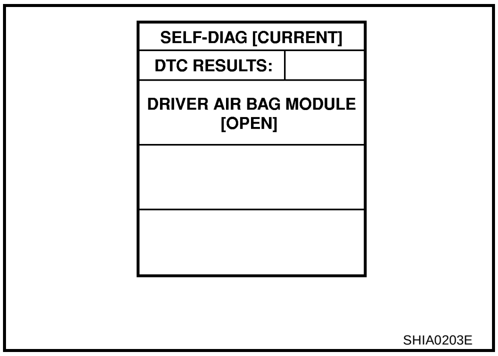
5. Touch “AIR BAG”.
   If “AIR BAG” is not indicated, GI-38, "CONSULT-II Data Link Connector (DLC) Circuit" .



6. Touch “SELF-DIAG [CURRENT]”.

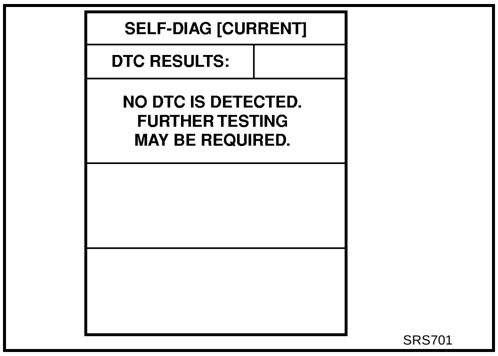


7. Diagnostic code is displayed on “SELF-DIAG [CURRENT]”.



If no malfunction is detected on “SELF-DIAG [CURRENT]” even though malfunction is detected in “SRS Operation Check”, check the battery voltage. If the battery voltage is less than 9V, charge or replace the battery. Then go to SRS-21, "DIAGNOSTIC PROCEDURE 3" . If the battery voltage is OK, go to SRS-23, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)" to diagnose the following cases:

- Self-diagnostic result “SELF-DIAG [PAST]” (previously stored in the memory) might not be erased after repair.
- The SRS system malfunctions intermittently.



CONSULT-II Diagnostic Code Chart (“SELF-DIAG [CURRENT]”)

Diagnostic item	Explanation		Repair order “Recheck SRS at each replacement”
NO DTC IS DETECTED.	When malfunction is indicated by the “AIR BAG” warning lamp in User mode.	● Low battery voltage (Less than 9V)	● Go to SRS-21, "DIAGNOSTIC PROCEDURE 3" after charging the battery.
		● Self-diagnostic result “SELF-DIAG [PAST]” (previously stored in the memory) might not be erased after repair. ● Intermittent malfunction has been detected in the past.	● Go to SRS-23, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)" . ● Go to SRS-23, "DIAGNOSTIC PROCEDURE 5" .
	● No malfunction is detected.		—
DRIVER AIRBAG MODULE [OPEN]	● Driver air bag module circuit is open (including the spiral cable).		1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the driver air bag module. (Before disposal, it must be deployed.) 4. Replace the spiral cable. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.
DRIVER AIRBAG MODULE [VB-SHORT]	● Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).		
DRIVER AIRBAG MODULE [GND-SHORT]	● Driver air bag module circuit is shorted to ground (including the spiral cable).		
DRIVER AIRBAG MODULE [SHORT]	● Driver air bag module circuit is shorted between lines.		
ASSIST A/B MODULE [OPEN]	● Front passenger air bag module circuit is open.		1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front passenger air bag module. (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
ASSIST A/B MODULE [VB-SHORT]	● Front passenger air bag module circuit is shorted to a power supply circuit.		
ASSIST A/B MODULE [GND-SHORT]	● Front passenger air bag module circuit is shorted to ground.		
ASSIST A/B MODULE [SHORT]	● Front passenger air bag module circuit is shorted between lines.		

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
SIDE MODULE LH [OPEN]	● Front LH side air bag module circuit is open.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front LH setback assembly (front LH side air bag module). (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [VB-SHORT]	● Front LH side air bag module circuit is shorted to a power supply circuit.	
SIDE MODULE LH [GND-SHORT]	● Front LH side air bag module circuit is shorted to ground.	
SIDE MODULE LH [SHORT]	● Front LH side air bag module circuit is shorted between lines.	
SIDE MODULE RH [OPEN]	● Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front RH setback assembly (front RH side air bag module). (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE RH [VB-SHORT]	● Front RH side air bag module circuit is shorted to a power supply circuit.	
SIDE MODULE RH [GND-SHORT]	● Front RH side air bag module circuit is shorted to ground.	
SIDE MODULE RH [SHORT]	● Front RH side air bag module circuit is shorted between lines.	
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	● LH side air bag (Satellite) sensor	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	● RH side air bag (Satellite) sensor	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the RH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [OPEN]	● Front LH pre-tensioner circuit is open.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the front LH seat belt. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [VB-SHORT]	● Front LH pre-tensioner circuit is shorted to a power supply circuit.	
PRE-TEN FRONT LH [GND-SHORT]	● Front LH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT LH [SHORT]	● Front LH pre-tensioner circuit is shorted between lines.	

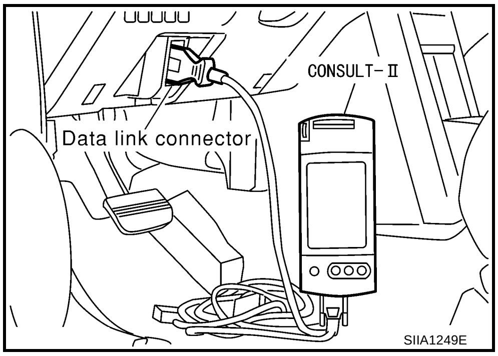
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
PRE-TEN FRONT RH [OPEN]	● Front RH pre-tensioner circuit is open.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the front RH seat belt. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT RH [VB-SHORT]	● Front RH pre-tensioner circuit is shorted to a power supply circuit.	
PRE-TEN FRONT RH [GND-SHORT]	● Front RH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT RH [SHORT]	● Front RH pre-tensioner circuit is shorted between lines.	
CONTROL UNIT	● Diagnosis sensor unit is malfunctioning.	1. Visually check the wiring harness connection. 2. Replace the diagnosis sensor unit.

- Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using air bag warning lamp or CONSULT-II each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work is not required.

DIAGNOSTIC PROCEDURE 3

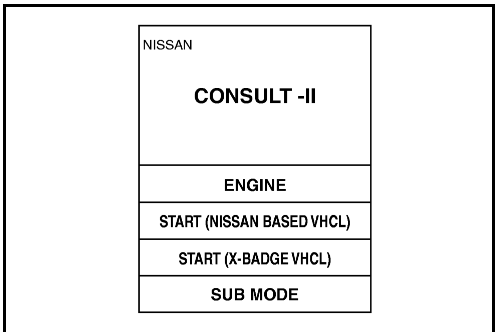
Final inspection after repairing SRS by using CONSULT-II — Diagnosis mode

1. After repairing SRS, connect both battery cables.
2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



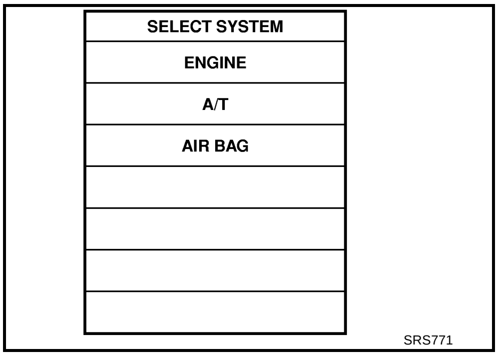
SIIA1249E

3. Turn ignition switch ON.
4. Touch “START (NISSAN BASED VHCL)”.



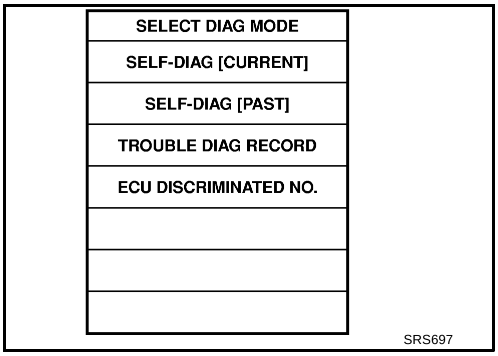
PBIB2276E

5. Touch “AIR BAG”.
   If “AIR BAG” is not indicated, go to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit" .



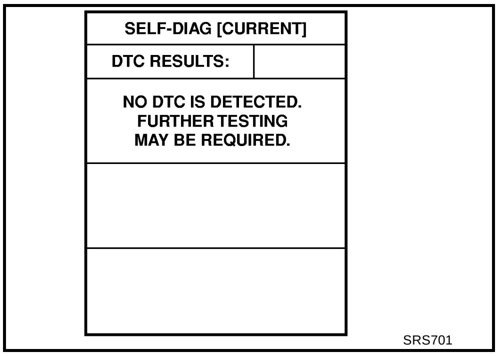
SRS771

6. Touch “SELF-DIAG [CURRENT]”.



SRS697

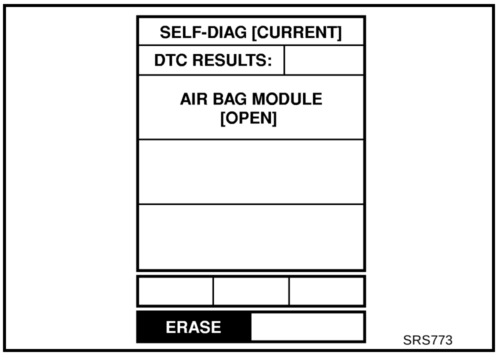
7. If no malfunction is detected on “SELF-DIAG [CURRENT]”, repair of SRS is completed. Go to step 8.
   If any malfunction is detected on “SELF-DIAG [CURRENT]”, the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to SRS-17, "DIAGNOSTIC PROCEDURE 2" , and repair malfunctioning part completely.



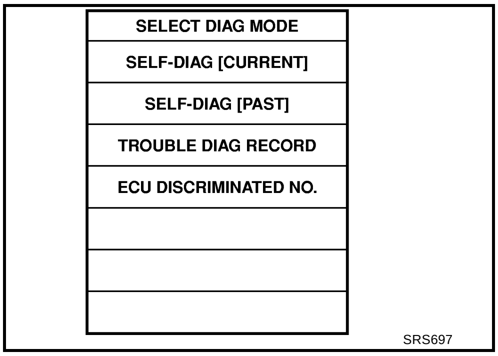
8. Touch “ERASE”.

   NOTE:

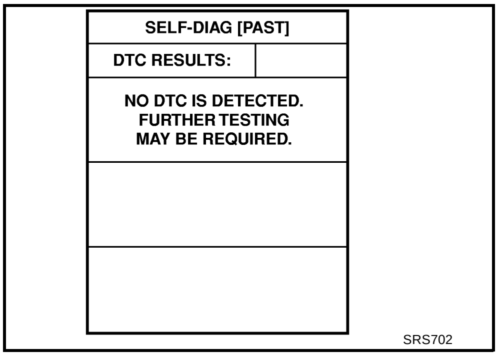
   Touch “ERASE” to clear the memory of the malfunction (“SELF-DIAG [PAST]”).
   If the memory of the malfunction in “SELF-DIAG [PAST]” is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.



9. Touch “BACK” key of CONSULT-II to “SELECT DIAG MODE” screen. Touch “SELF-DIAG [PAST]”.



10. Make sure no malfunction is detected on “SELF-DIAG [PAST]”.
11. Touch “BACK” key of CONSULT-II until “SELECT SYSTEM” appears in order to return to User mode from Diagnosis mode.
12. Turn ignition switch OFF then turn off and disconnect CONSULT-II. Go to SRS-15, "Checking Air Bag Operation by Using “AIR BAG” Warning Lamp — User Mode" .



DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

Inspecting SRS malfunctioning record

1. CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING

Is it the first time for maintenance of SRS?

YES or NO

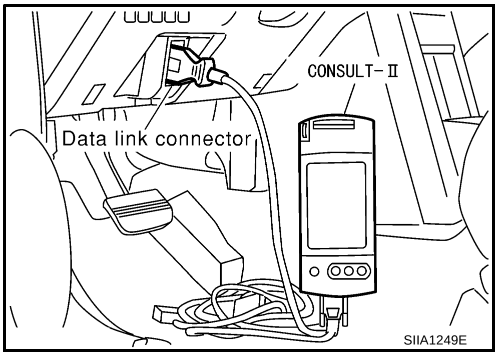
YES >> Go to SRS-17, "DIAGNOSTIC PROCEDURE 2" .

NO >> Self-diagnostic result “SELF-DIAG [PAST]” (previously stored in the memory) might not be erased after repair. Go to SRS-21, "DIAGNOSTIC PROCEDURE 3" .

DIAGNOSTIC PROCEDURE 5

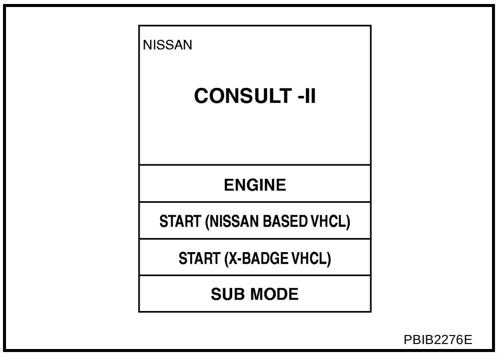
Inspecting SRS intermittent malfunction by using CONSULT-II — Diagnosis mode

1. Turn ignition switch OFF.
2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



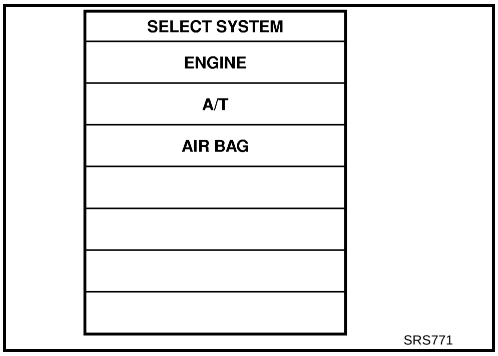
SIIA1249E

3. Turn ignition switch ON.
4. Touch “START (NISSAN BASED VHCL)”.



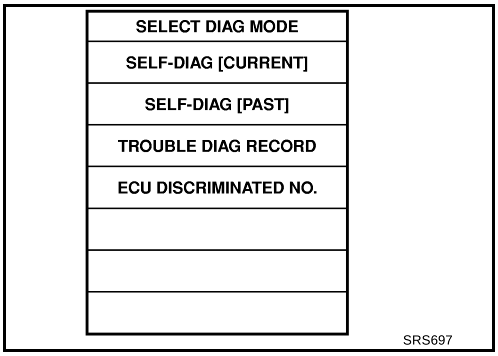
PBIB2276E

5. Touch “AIR BAG”.
   If “AIR BAG” is not indicated, go to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit" .

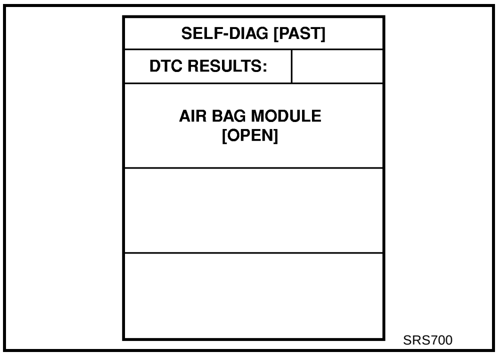


SRS771

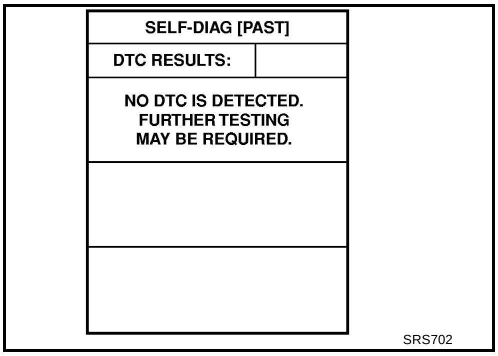
6. Touch “SELF-DIAG [PAST]”.



7. If diagnostic codes are displayed on “SELF-DIAG [PAST]”, go to step 10.

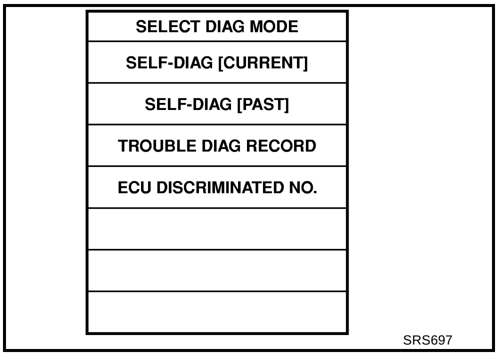


If no malfunction is detected on “SELF-DIAG [PAST]”, touch “BACK” and go back to “SELECT DIAG MODE”.

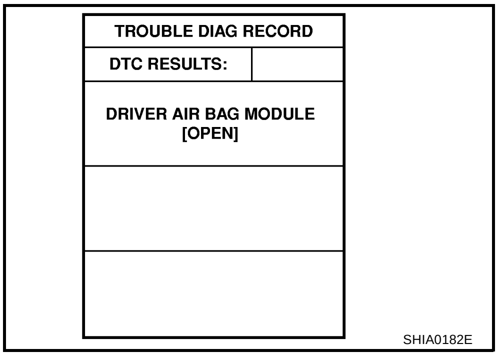


8. Touch “TROUBLE DIAG RECORD”.

NOTE:
With “TROUBLE DIAG RECORD”, diagnosis results previously erased by a reset operation can be displayed.



9. Diagnostic code is displayed on “TROUBLE DIAG RECORD”.
10. Touch “PRINT”.
11. Compare diagnostic codes to SRS-25, "CONSULT-II Diagnostic Code Chart (“SELF-DIAG [PAST]” or “TROUBLE DIAG RECORD”)" .
12. Touch “BACK” key of CONSULT-II until “SELECT SYSTEM” appears.
13. Turn ignition switch OFF, then turn off and disconnect CONSULT-II, and both battery cables.



14. Repair the system as outlined by the “Repair order” in “Intermittent Malfunction Diagnostic Code Chart”, that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to the Removal and Installation procedure for the appropriate component.
15. Go to SRS-21, "DIAGNOSTIC PROCEDURE 3" , for final checking.

CONSULT-II Diagnostic Code Chart (“SELF-DIAG [PAST]” or “TROUBLE DIAG RECORD”)

Diagnostic item	Explanation	Repair order “Recheck SRS at each replacement”
NO DTC IS DETECTED.	When malfunction is indicated by the “AIR BAG” warning lamp in User mode. / ● Low battery voltage (Less than 9V)	● Go to SRS-21, "DIAGNOSTIC PROCEDURE 3" after charging the battery.
	● No malfunction is detected.	● Go to SRS-21, "DIAGNOSTIC PROCEDURE 3" .
DRIVER AIRBAG MODULE [OPEN]	● Driver air bag module circuit is open (including the spiral cable).	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the driver air bag module. (Before disposal, it must be deployed.) 4. Replace the spiral cable. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.
DRIVER AIRBAG MODULE [VB-SHORT]	● Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).	
DRIVER AIRBAG MODULE [GND-SHORT]	● Driver air bag module circuit is shorted to ground (including the spiral cable).	
DRIVER AIRBAG MODULE [SHORT]	● Driver air bag module circuit is shorted between lines.	
ASSIST A/B MODULE [OPEN]	● Front passenger air bag module circuit is open.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front passenger air bag module. (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
ASSIST A/B MODULE [VB-SHORT]	● Front passenger air bag module circuit is shorted to a power supply circuit.	
ASSIST A/B MODULE [GND-SHORT]	● Front passenger air bag module circuit is shorted to ground.	
ASSIST A/B MODULE [SHORT]	● Front passenger air bag module circuit is shorted between lines.	
SIDE MODULE LH [OPEN]	● Front LH side air bag module circuit is open.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front LH setback assembly (front LH side air bag module). (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [VB-SHORT]	● Front LH side air bag module circuit is shorted to a power supply circuit.	
SIDE MODULE LH [GND-SHORT]	● Front LH side air bag module circuit is shorted to ground.	
SIDE MODULE LH [SHORT]	● Front LH side air bag module circuit is shorted between lines.	
SIDE MODULE RH [OPEN]	● Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front RH setback assembly (front RH side air bag module). (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE RH [VB-SHORT]	● Front RH side air bag module circuit is shorted to a power supply circuit.	
SIDE MODULE RH [GND-SHORT]	● Front RH side air bag module circuit is shorted to ground.	
SIDE MODULE RH [SHORT]	● Front RH side air bag module circuit is shorted between lines.	

Diagnostic item	Explanation	Repair order “Recheck SRS at each replacement”
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	● LH side air bag (Satellite) sensor	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	● RH side air bag (Satellite) sensor	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the RH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [OPEN]	● Front LH pre-tensioner circuit is open.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the front LH seat belt. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [VB-SHORT]	● Front LH pre-tensioner circuit is shorted to a power supply circuit.	
PRE-TEN FRONT LH [GND-SHORT]	● Front LH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT LH [SHORT]	● Front LH pre-tensioner circuit is shorted between lines.	
PRE-TEN FRONT RH [OPEN]	● Front RH pre-tensioner circuit is open.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the front RH seat belt. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT RH [VB-SHORT]	● Front RH pre-tensioner circuit is shorted to a power supply circuit.	
PRE-TEN FRONT RH [GND-SHORT]	● Front RH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT RH [SHORT]	● Front RH pre-tensioner circuit is shorted between lines.	
CONTROL UNIT	● Diagnosis sensor unit is malfunctioning.	1. Visually check the wiring harness connection. 2. Replace the diagnosis sensor unit.

Trouble Diagnosis without CONSULT-II

AHS000RM

DIAGNOSTIC PROCEDURE 6

Inspecting SRS Malfunctioning Parts By Using “AIR BAG” Warning Lamp — Diagnosis Mode

NOTE:

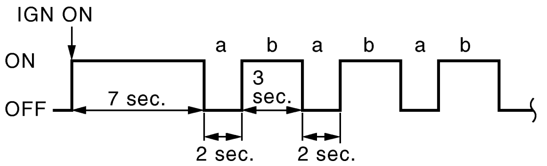
SRS will not enter Diagnosis mode if no malfunction is detected in User mode.

1. Turn ignition switch ON.
2. After “AIR BAG” warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
3. Wait more than 3 seconds.
4. Repeat the steps 1 to 3 twice. (Perform three times in all.)
5. Turn ignition switch ON.

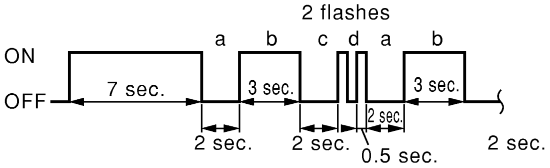
SRS is now in Diagnosis mode.

“AIR BAG” warning lamp operates in Diagnosis mode as follows:

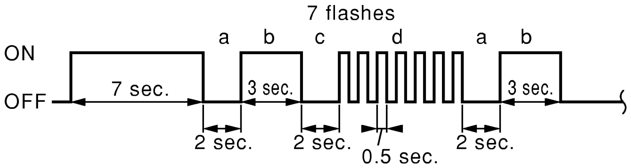
WARNING LAMP FLASH CODE CHART

<Diagnosis results (previously stored in the memory) might not be erased after repair or intermittent malfunctions have been detected in the past.>	
Flash pattern	Repair order
a through b are repeated.  	1. Erase memory. (Once key switch is turned from OFF to ON, TROUBLE DIAG RECORD will be erased.)

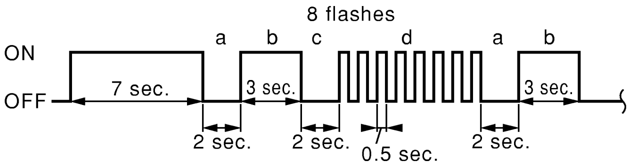
PHIA0532E

<Driver air bag module>	
Flash pattern	Repair order
a through d are repeated. d: Two flashes indicates malfunctioning driver air bag module circuit.  	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the spiral cable. 4. Replace driver air bag module. (Before disposal, it must be deployed.) 5. Replace the diagnosis sensor unit. 6. Replace the related harness.

PHIA0185E

<Diagnosis sensor unit>	
Flash pattern	Repair order
a through d are repeated. d: Seven flashes indicate malfunctioning diagnosis sensor unit circuit.  	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the diagnosis sensor unit. 4. Replace the related harness.

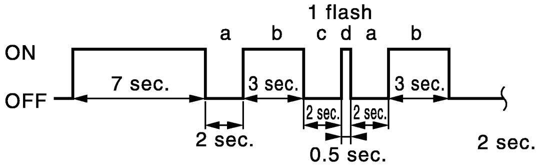
SHIA0028E

<Front passenger air bag module>	
Flash pattern	Repair order
a through d are repeated. d: Eight flashes indicate malfunctioning front passenger air bag module circuit.  	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front passenger air bag module. (Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.

SHIA0029E

<Front RH seat belt pre-tensioner>

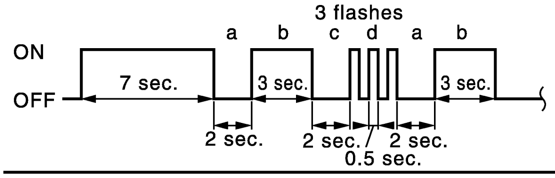
Flash pattern	Repair order
a through d are repeated. d: One flash indicates malfunctioning front RH seat belt pre-tensioner circuit.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front RH seat belt pre-tensioner. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.



SHIA0030E

<Front LH seat belt pre-tensioner>

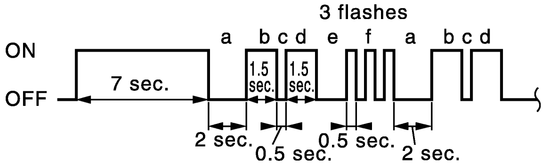
Flash pattern	Repair order
a through d are repeated. d: Three flashes indicate malfunctioning front LH seat belt pre-tensioner circuit.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front LH seat belt pre-tensioner. (Before disposal, it must be activated.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.



SHIA0031E

<RH side air bag (Satellite) sensor>

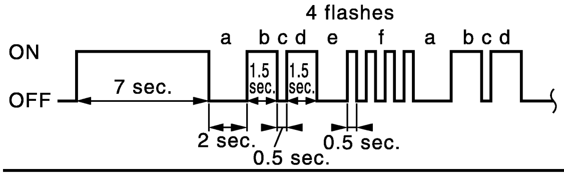
Flash pattern	Repair order
a through f are repeated. f: Three flashes indicate malfunctioning RH side air bag (Satellite) sensor circuit.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the RH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.



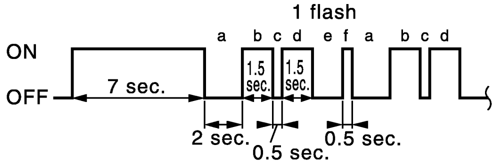
SHIA0032E

<LH side air bag (Satellite) sensor>

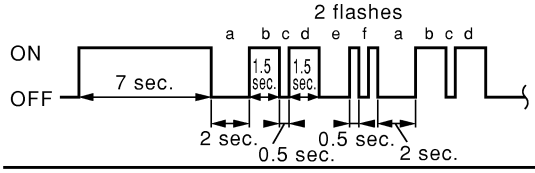
Flash pattern	Repair order
a through f are repeated. f: Four flashes indicate malfunctioning LH side air bag (Satellite) sensor.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.



SHIA0033E

<table>
<tr><th colspan="2"><Front RH side air bag module></th></tr>
<tr><th>Flash pattern</th><th>Repair order</th></tr>
<tr><td>a through f are repeated.
f: One flash indicate malfunctioning front RH side air bag module circuit.

</td><td>1. Visually check the wiring harness connection.
2. Replace the harness if it has visible damage.
3. Replace front RH side air bag module.
(Before disposal, it must be deployed.)
4. Replace the diagnosis sensor unit.
5. Replace the related harness.</td></tr>
</table>

SHIA0034E

<table>
<tr><th colspan="2"><Front LH side air bag module></th></tr>
<tr><th>Flash pattern</th><th>Repair order</th></tr>
<tr><td>a through f are repeated.
f: Two flashes indicate malfunctioning front LH side air bag module circuit.

</td><td>1. Visually check the wiring harness connection.
2. Replace the harness if it has visible damage.
3. Replace front LH side air bag module.
(Before disposal, it must be deployed.)
4. Replace the diagnosis sensor unit.
5. Replace the related harness.</td></tr>
</table>

SHIA0035E

Trouble Diagnosis: “AIR BAG” Warning Lamp Does Not Turn Off

AHS000RN

DIAGNOSTIC PROCEDURE 7

1. CHECK THE DEPLOYMENT OF AIR BAG MODULE

Is air bag module deployed?

YES or NO

YES >> Refer to SRS-49, "COLLISION DIAGNOSIS" .
NO >> GO TO 2.

2. CHECK THE AIR BAG FUSE

Check 10A fuse [No.9, located in fuse block (J/B)].
Refer to PG-2, "POWER SUPPLY ROUTING" .

OK or NG

OK >> GO TO 4.
NG >> GO TO 3.

3. CHECK AIR BAG FUSE AGAIN

Replace “AIR BAG” fuse and turn ignition switch ON.

Does the “AIR BAG” fuse blow again?

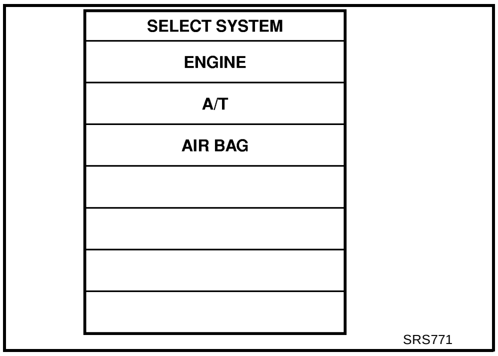
YES >> Repair main harness.
NO >> **INSPECTION END**

4. CHECK DIAGNOSIS SENSOR UNIT

Connect CONSULT-II and touch “START”.
Is “AIR BAG” displayed on CONSULT-II?

YES or NO

YES >> GO TO 5.
NO >> Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.



SRS771

5. CHECK HARNESS CONNECTION

Is harness connection between warning lamp and diagnosis sensor unit OK?

OK or NG

OK >> Replace diagnosis sensor unit.
NG >> Connect “AIR BAG” warning lamp and diagnosis sensor unit connector properly. If “AIR BAG” warning lamp still does not go off, replace harness.

Trouble Diagnosis: “AIR BAG” Warning Lamp Does Not Turn On

AHS000RO

DIAGNOSTIC PROCEDURE 8

1. CHECK METER FUSE

Check 10A fuse [No.11, located in fuse block (J/B)].
Refer to PG-2, "POWER SUPPLY ROUTING" .

OK or NG

OK >> GO TO 3.
NG >> GO TO 2.

2. CHECK METER FUSE AGAIN

Replace 10A fuse [No.11, located in fuse block (J/B)] and turn ignition switch ON.

Does the meter fuse blow again?

YES >> Repair the related harness.
NO >> **INSPECTION END**

3. CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND COMBINATION METER

Disconnect diagnosis sensor unit connector and turn ignition switch ON.
Does “AIR BAG” warning lamp turn on?

YES or NO

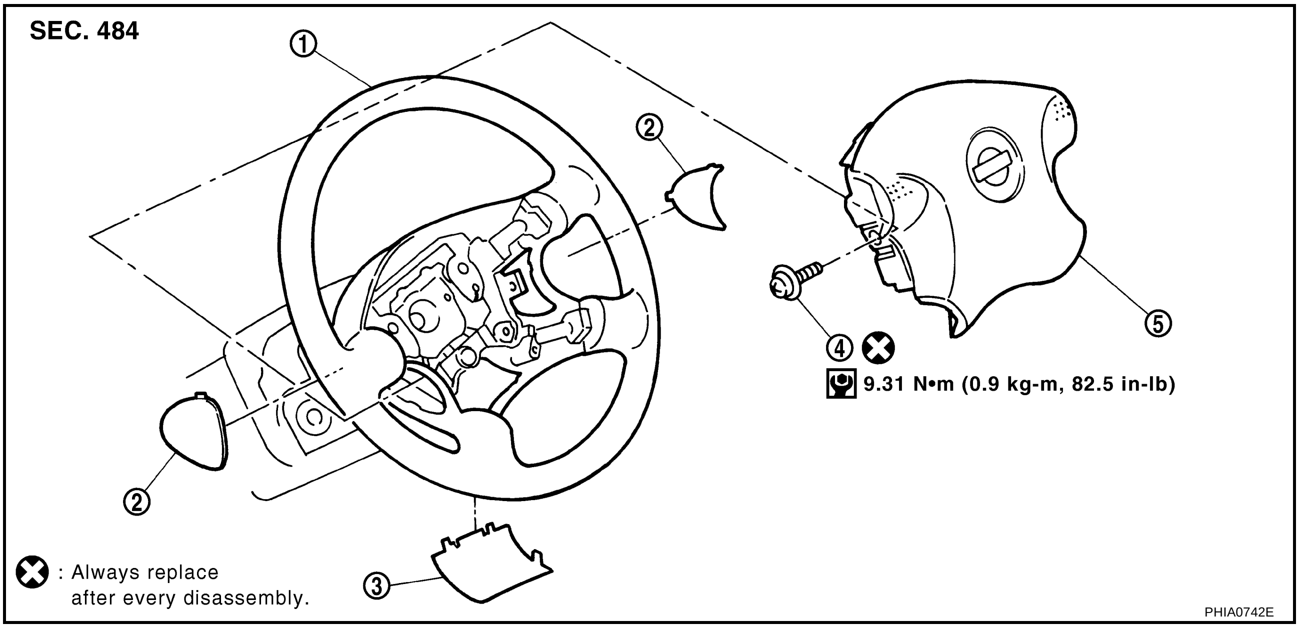
YES >> Replace diagnosis sensor unit.
NO >> Replace combination meter assembly.

DRIVER AIR BAG MODULE

PFP:K8510

Removal and Installation

AHS000QU



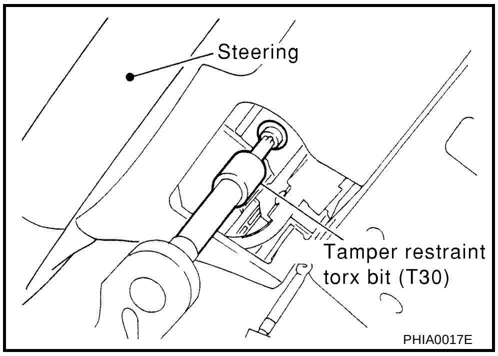
1.	Steering wheel	2.	Side lid	3.	Lower lid
4.	Special bolt	5.	Driver air bag module		

REMOVAL

CAUTION:

- **Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.**
- **Always work from the side of driver air bag module.**

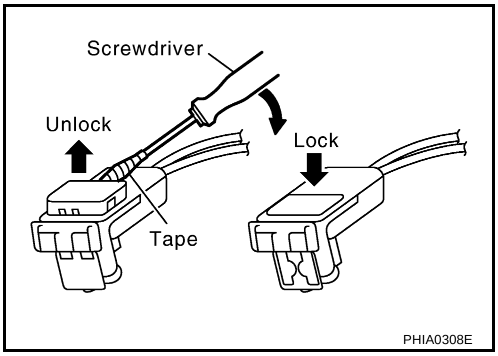
1. Remove the side lids.
2. Using Tamper resistant TORX bit (T30), remove the special bolts at right and left.



3. Disconnect the air bag harness connector, and remove the driver air bag module.

   CAUTION:

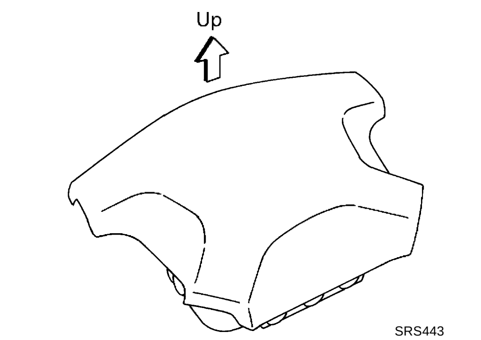
   - **For installing / removing driver air bag module connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.**
   - **Install connector with lock raised, and push lock into connector.**



A
B
C
D
E
F
G
SRS
I
J
K
L
M

CAUTION:

- **Always work from the side of driver air bag module.**
- **Always place driver air bag module with pad side facing upward.**
- **Do not insert any foreign objects (screwdriver, etc.) into driver air bag module.**
- **Do not attempt to disassemble driver air bag module.**
- **Do not use old bolts after removal; replace with new bolts.**
- **Do not expose the driver air bag module to temperatures exceeding 90°C (194°F).**



SRS443

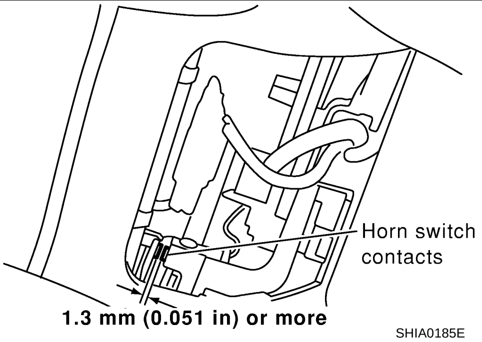
- **Replace driver air bag module if it has been dropped or sustained an impact.**
- **Do not allow oil, grease or water to come in contact with the front passenger air bag module.**

SBF814E

INSTALLATION

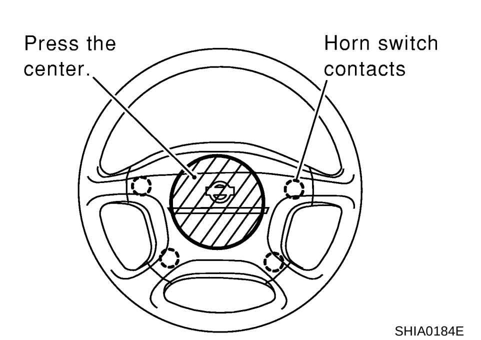
Install in the reverse order of removal paying attention to the following.

- After installing the air bag module, check that the contact clearance of the horn switch is in the specified range in the right.



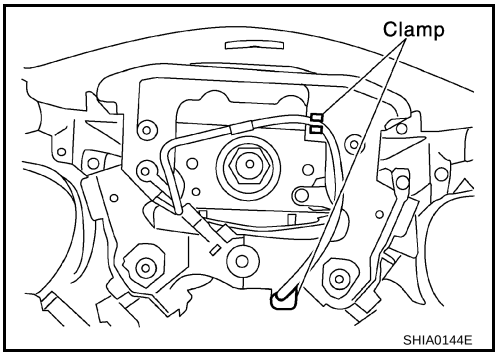
SHIA0185E

- For installing the air bag module, tighten the special bolts with the center of the horn pad pressed to make the contacts (RH/LH) ON.



SHIA0184E

- When installing driver air bag module, fix driver air bag module harness and harness connector to clip.
- After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-15, "SRS Operation Check" .

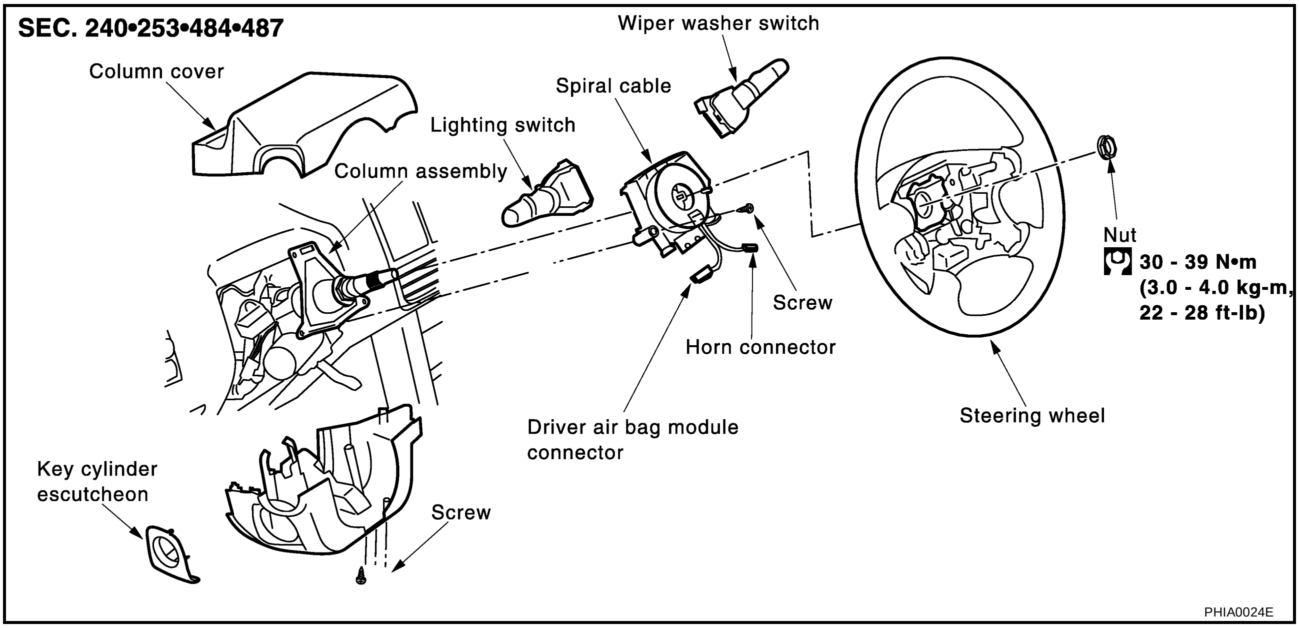


SPIRAL CABLE

PFP:25554

Removal and Installation

AHS000QV



REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

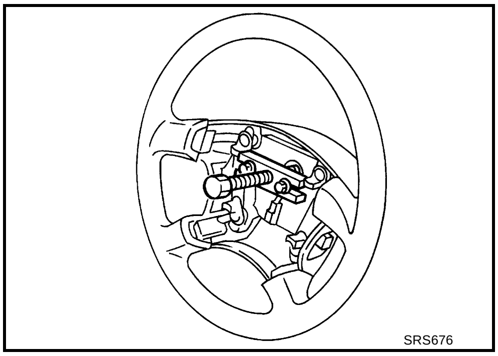
1. Remove driver air bag module. Refer to SRS-32, "Removal and Installation" .
2. Set the steering wheel in the neutral position.
3. Remove steering column cover. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
4. Disconnect the horn connector and the driver air bag module connector.

   CAUTION:

   Do not tap or bump the steering wheel.
5. Remove steering wheel nut.
6. Remove steering wheel with steering wheel puller.

   CAUTION:

   Be careful not to over-tighten puller on steering wheel.



7. Remove the spiral cable fixing screws, and while pushing the upper plastic tab, remove the spiral cable.

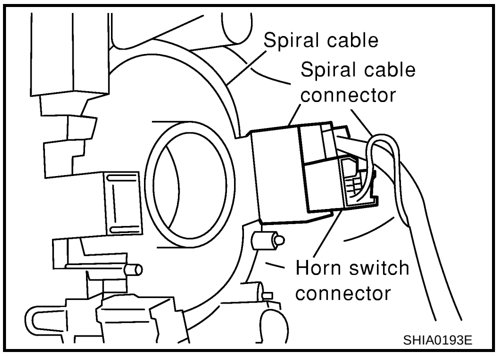
   CAUTION:

   - **Do not attempt to disassemble spiral cable.**
   - **Do not apply lubricant to the spiral cable.**
8. Remove the wiper washer switch and lighting switch from the spiral cable.

9. Disconnect the horn switch connector and then the spiral cable connector.

   CAUTION:

   Also, with the steering linkage disconnectedly cable may snap by turning the steering wheel beyond the limited number of turns.

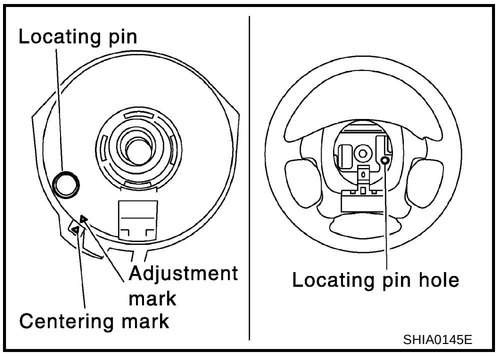


INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **The spiral cable may snap due to steering operation if the cable is installed in an improper position.**
- **Also, with the steering linkage disconnectedly cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned to the left about 2.5 turns from the right end position.**
- **After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to** **SRS-15, "SRS Operation Check"** **.**



FRONT PASSENGER AIR BAG MODULE

PFP:K8515

Removal and Installation

AHS000QW

REMOVAL

CAUTION:

- **Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.**
- **Always work from the side of or under front passenger air bag module.**

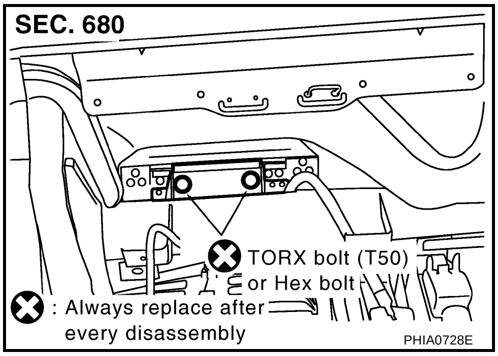
1. Remove the glove box. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
2. Disconnect the front passenger air bag harness connector.
3. Remove front passenger air bag fixing bolts.
   Use Tamper resistant TORX bit (T50) to remove TORX bolts (T50).

   TORX bolt (size T50):

   : 19.6 N·m (2.0 kg-m, 14.5 ft-lb)

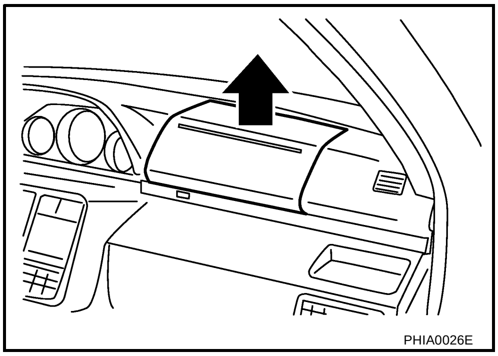
   Hex bolt:

   : 24.5 N·m (2.5 kg-m, 18.1 ft-lb)



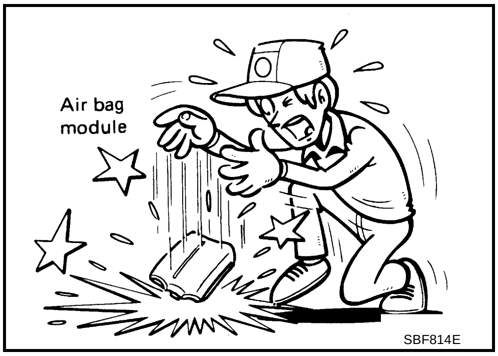
PHIA0728E

4. Pull front passenger air bag module upward. Then remove front passenger air bag module from instrument panel.


PHIA0026E

CAUTION:

- **Always place front passenger air bag module with warning label side facing upward.**
- **Do not insert any foreign objects (screwdriver, etc.) into front passenger air bag module.**
- **Do not attempt to disassemble front passenger air bagmod-ule.**
- **Do not use old bolts after removal; replace with new bolts.**
- **Replace front passenger air bag module if it has been dropped or sustained an impact.**
- **Do not expose the front passenger air bag module to tem-peratures exceeding 90°C (194°F).**
- **Do not allow oil, grease or water to come in contact with the front passenger air bag module.**
- **After front passenger air bag module inflates, the instrument panel assembly should be replaced.**



SBF814E

INSTALLATION

Install in the reverse order of removal.

CAUTION:

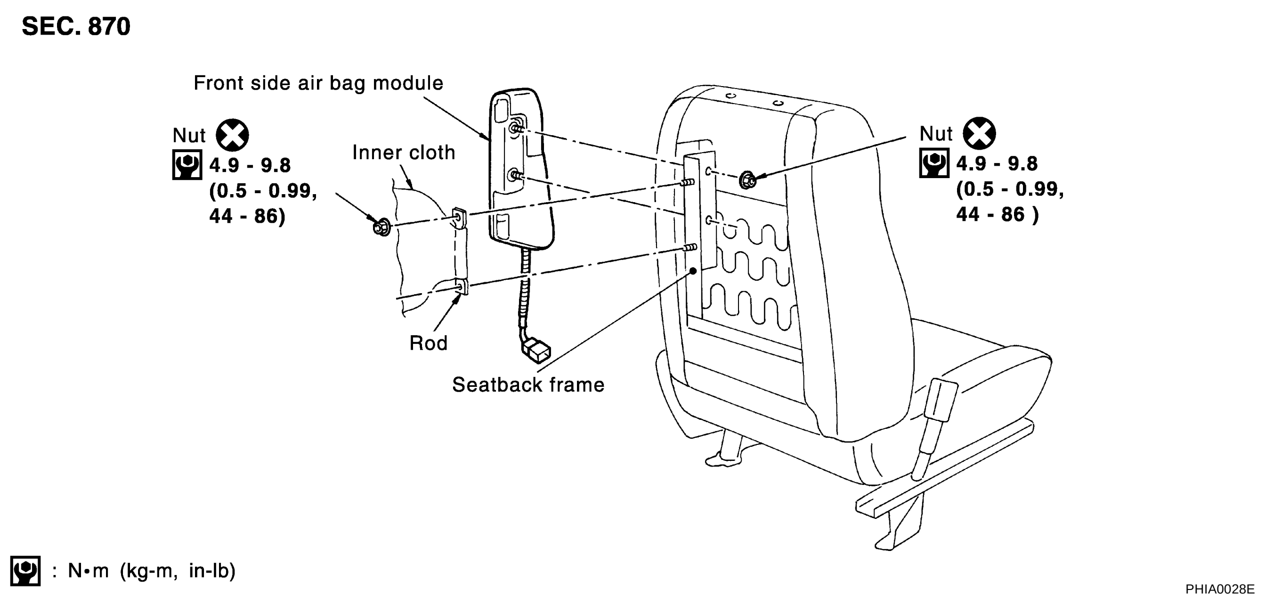
- **Always work from the side of or under front passenger air bag module.**
- **After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-15, "SRS Operation Check" .**

FRONT SIDE AIR BAG MODULE

PFP:K8EH0

Removal and Installation

AHS000QX



PHIA0028E

REMOVAL

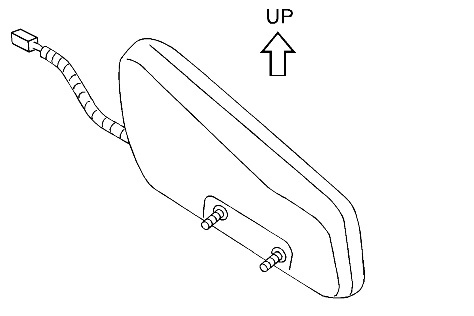
CAUTION:

- **Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.**
- **Always work from the rear of the front side air bag module.**

1. Pull up the seatback trim.
2. Remove the nuts securing the inner cloth with seatback frame. Then pull up the inner cloth.
3. Remove the side air bag module fixing nuts, and remove the front side air bag module.

CAUTION:

- **When using a clip removal tool to remove the seatback board, take care not to damage the harness for front side air bag module.**
- **Always place the front side air bag module standing with the stud bolt side setting bottom.**
- **Do not insert any foreign objects (screwdrivers) into front side air bag module**
- **Do not attempt to disassemble front side air bag module.**



SRS623

- **Do not use old nuts after removal; replace with new bolts.**
- **Replace side air bag module if it has been dropped or sustained an impact.**
- **Do not expose the front side air bag module to temperatures exceeding 90°C (194°F).**
- **Do not allow oil, grease or water to come in contact with the front side air bag module.**
- **After front side air bag module inflates, all parts of front seatback frame (including front seatback flame) should be replaced.**

SBF814E

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Always work from the rear of the front side air bag module.**
- **After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-15, "SRS Operation Check" .**

SIDE AIR BAG (SATELLITE) SENSOR

PFP:98830

Removal and Installation

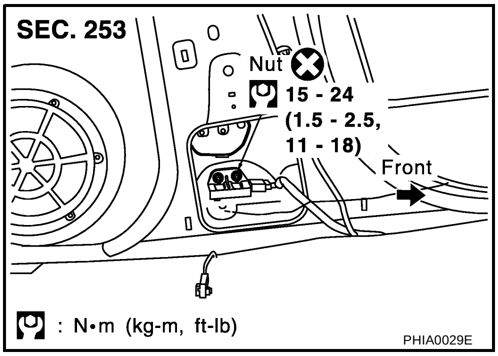
AHS000QY

REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

1. Remove seat belt pre-tensioner seat belt. Refer to SB-3, "Removal and Installation of Front Seat Belt" .
2. Remove side air bag (Satellite) sensor fixing nuts.
3. Remove the side air bag (Satellite) sensor connector.



CAUTION:

- **Do not use old nuts, replace with new ones.**
- **Check side air bag (Satellite) sensor to ensure they are free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it with new one.**
- **Do not attempt to disassemble side air bag (Satellite) sensor.**
- **Replace side air bag (Satellite) sensor if it has been dropped or sustained an impact.**
- **When the front side air bag deploys, always replace it with a new one.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Check side air bag (Satellite) sensor for proper installation.**
- **After replacement of side air bag (Satellite) sensor, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-15, "SRS Operation Check" .**

FRONT SEAT BELT PRE-TENSIONER

PFP:86884

Removal and Installation

AHS000QZ

To removal and installation procedures, refer to SB-3, "Removal and Installation of Front Seat Belt" .

DIAGNOSIS SENSOR UNIT

PFP:28556

Removal and Installation

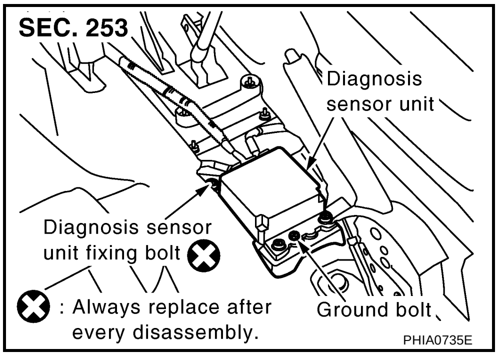
AHS000R0

REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

1. Disconnect each harness connector for the air bag module and seat belt pre-tensioner.
2. Remove center console. Refer to IP-11, "Removal and Installation" .
3. Disconnect diagnosis sensor unit connector.
4. Remove ground bolt and diagnosis sensor unit fixing bolts.



Ground bolt:

: 6.9 N·m (0.7 kg-m, 61 in-lb)

Diagnosis sensor unit fixing bolt:

: 24.5 N·m (2.5 kg-m, 18.1 ft-lb)

CAUTION:

- **Do not use old bolts. Replace with new ones.**
- **Check diagnosis sensor unit brackets to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it with new one.**
- **Replace diagnosis sensor unit if it has been dropped or sustained an impact.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Check the diagnosis sensor unit for proper installation.**
- **After replacement of diagnosis sensor unit, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-15, "SRS Operation Check" .**

ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, make sure that the diagnosis sensor unit identification is correct for the vehicle as equipped.

Specification	ECU discriminated No.
Model with driver and passenger air bags and seat belt pre-tensioner	AA12
Model with driver and passenger air bags, seat belt pre-tensioner and front side air bag	AA01

DISPOSAL OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

PFP:00014

Caution for Air Bag Module and Seat Belt Pre-Tensioner

AHS000R1

- Before disposing of air bag module and seat belt pre-tensioner, or vehicles equipped with such systems, deploy the systems. If such systems have already been deployed due to an accident, dispose of them as indicated in SRS-43, "DISPOSAL OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER" .
- When deploying the air bag module and seat belt pre-tensioner, always use the Special Service Tool; Deployment tool [SST: KV99106400 (J-38381)].
- When deploying the air bag module and seat belt pre-tensioner, stand at least 5 m (16 ft) away from the deployment component.
- When deploying air bag module and seat belt pre-tensioner, a fairly loud noise is made, followed by smoke being released. The smoke is not poisonous, however, be careful not to inhale smoke since it irritates the throat and can cause choking.
- Always activate one air bag module at a time.
- Due to heat, leave air bag module unattended for more than 30 minutes after deployment. Also leave seat belt pre-tensioner unattended for more than 10 minutes after deployment.
- Be sure to wear gloves when handling a deployed air bag module and seat belt pre-tensioner.
- Never apply water to the deployed air bag module and seat belt pre-tensioner.
- Wash your hands clean after finishing work.
- Place the vehicle outdoors with an open space of at least 6 m (20 ft) on all sides when deploying air bag module and seat belt pre-tensioner while mounted in vehicle.
- Use a voltmeter to make sure the vehicle battery is fully charged.
- Do not dispose of the air bag module and seat belt pre-tensioner un-deployed.

CHECKING DEPLOYMENT TOOL

Connecting to Battery

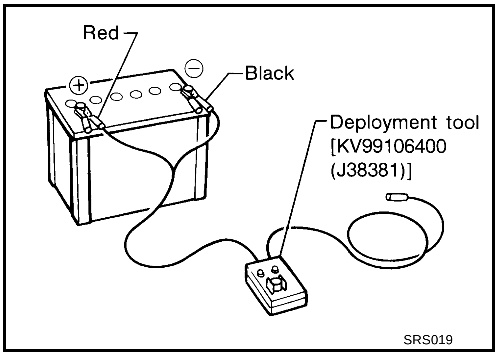
CAUTION:

The battery must show voltage of 9.6 V or more.

Remove the battery from the vehicle and place it on dry wood blocks approximately 5 m (16 ft) away from the vehicle.

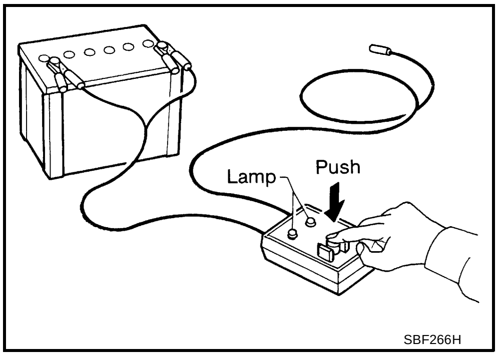
- Wait 3 minutes after the vehicle battery is disconnected before proceeding.
- Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.

Make sure the polarity is correct. The right side lamp in the tool, marked "deployment tool power", should glow with a green light. If the right side lamp glows red, reverse the connections to the battery.



Deployment Tool Check

Press the deployment tool switch to the ON position. The left side lamp in the tool, marked "air bag connector voltage" should illuminate. If it does not illuminate, replace the tool.



Air Bag Deployment Tool Lamp Illumination Chart (Battery Connected)

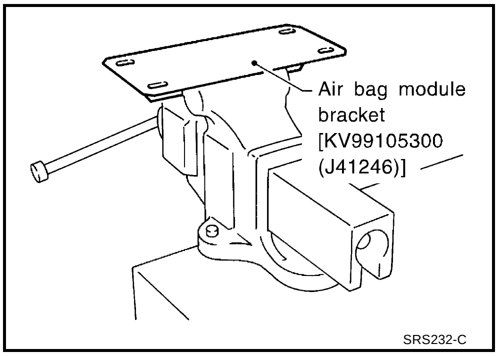
Switch operation	Left side lamp, green* “AIR BAG CONNECTOR VOLTAGE”	Right side lamp, green* “DEPLOYMENT TOOL POWER”
OFF	OFF	ON
ON	ON	ON

*: If this lamp glows red, the tool is connected to the battery incorrectly. Reverse the connections and make sure the lamp glows green.

DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

Unless the vehicle is being scrapped, deploying the air bag in the vehicle is not recommended. This may cause damage to the vehicle interior.

Anchor air bag module bracket [SST: KV99105300 (J-41246)] in a vise secured to a firm foundation during deployment.



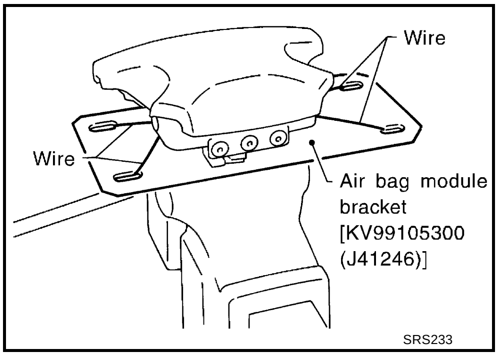
Deployment of Driver Air Bag Module (Outside of Vehicle)

1. Using wire, secure air bag module to air bag module bracket [SST: KV99105300 (J-41246)] at two places.

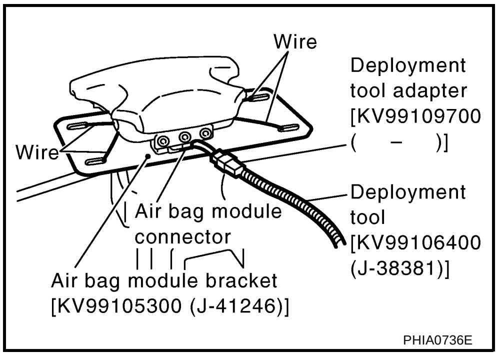
   CAUTION:

   Use wire of at least 1 mm (0.04 in) diameter.

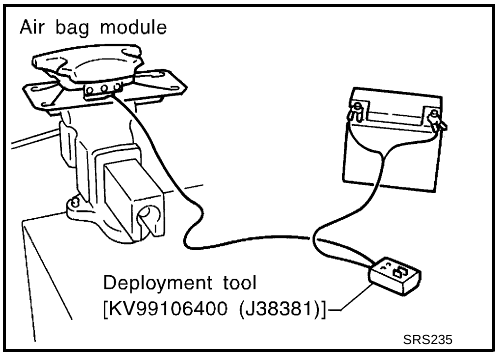
2. Firmly secure air bag module bracket [SST: KV99105300 (J-41246)] with air bag module attached in a vise.



3. Connect deployment tool adapter [SST: KV99109700 (-)] to deployment tool [SST: KV99106400 (J-38381)] to air bag module connector.



4. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.



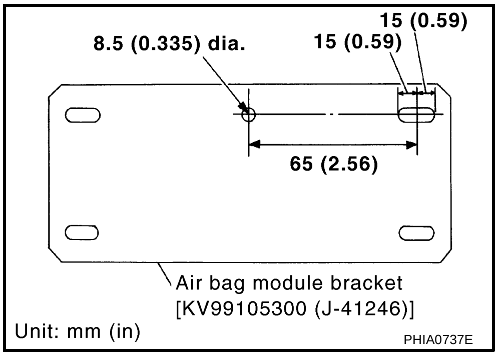
5. The lamp on the right side of the tool, marked “deployment tool power”, should glow green, not red.
6. Press the button on the deployment tool. The left side lamp on the tool, marked “air bag connector voltage”, will illuminate and the air bag module will deploy.

CAUTION:

When deploying the driver air bag module, stand at least 5 m (16 ft) away from the air bag module.

Deployment of Front Passenger Air Bag Module (Outside of Vehicle)

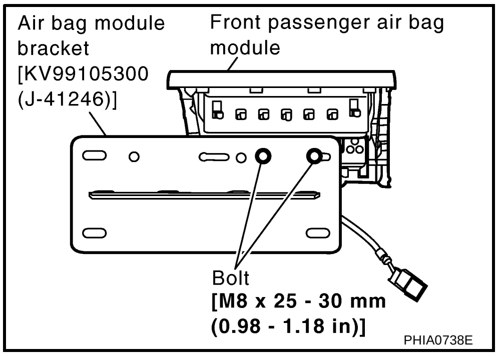
1. Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J-41246)] at the position shown in figure at right.
2. Firmly secure air bag module bracket [SST: KV99105300 (J-41246)] in a vise.



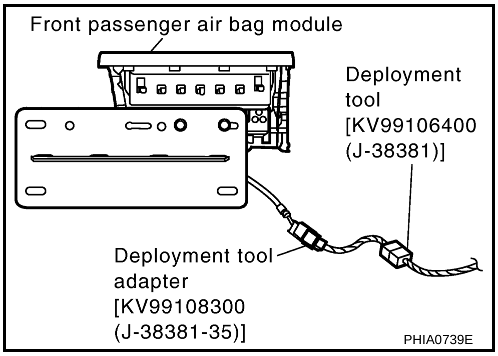
3. Match the two holes in air bag module bracket (held in vise) and front passenger air bag module and fix them with two bolts [M8 × 25 - 30 mm (0.98 - 1.18 in)].

   CAUTION:

   If a gap exists between front passenger air bag module and air bag module bracket, use a piece of wood inserted in the gap to stabilize the air bag module.



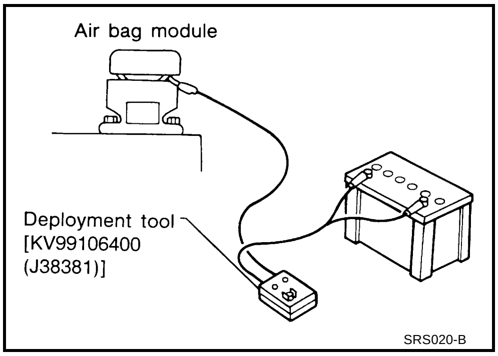
4. Connect deployment tool adapter [SST: KV99108300 (J-38381-35)] to deployment tool [SST: KV99106400 (J-38381)] connector and front passenger air bag module connector.
5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
6. The lamp on the right side of the tool, marked “deployment tool power”, should glow green, not red.



7. Press the button on the deployment tool. The left side lamp on the tool, marked “air bag connector voltage”, will illuminate and the air bag module will deploy.

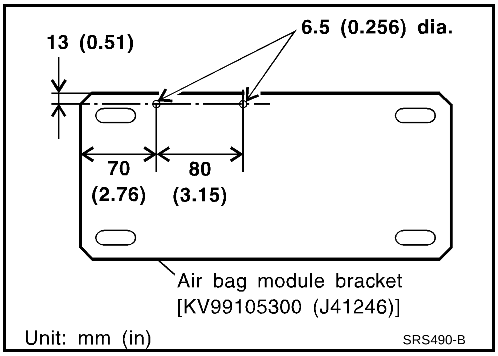
CAUTION:

- **When deploying the front passenger air bag module, do not stand on the deploying side.**
- **Stand at least 5 m (16 ft) away from the air bag module.**



Deployment of Front Side Air Bag Module (Outside of Vehicle)

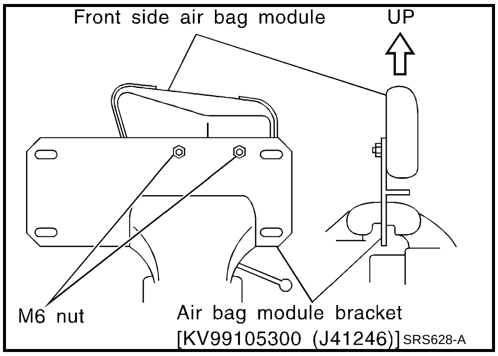
1. Make 6.5 mm (0.256 in) diameter holes in air bag module bracket [SST: KV99105300 (J-41246)] at the position shown in figure at right.



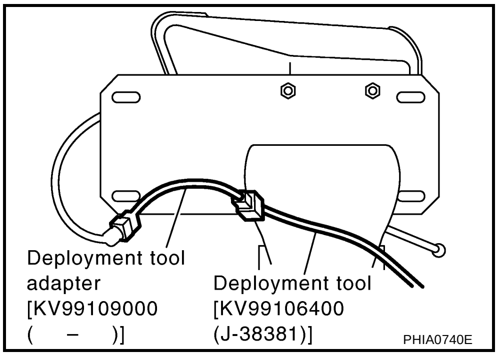
2. Firmly secure air bag module bracket [SST: KV99105300 (J-41246)] in a vise.
3. Insert the stud bolts of side air bag module into the two holes in air bag module bracket (held in vise) and fix them with two M6 nuts.

   CAUTION:

   Side air bag module should be secured to air bag module bracket [SST: KV99105300 (J-41246)] in a vise with stud bolt side setting bottom.



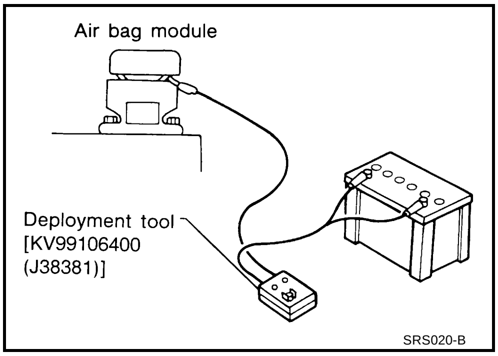
4. Connect deployment tool adapter [SST: KV99109000 (-)] to deployment tool [SST: KV99106400 (J-38381)] connector and connector on air bag module.



5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
6. The lamp on the right side of the tool, marked “deployment tool power”, should glow green, not red.
7. Press the button on the deployment tool. The left side lamp on the tool, marked “air bag connector voltage”, will illuminate and the air bag module will deploy.

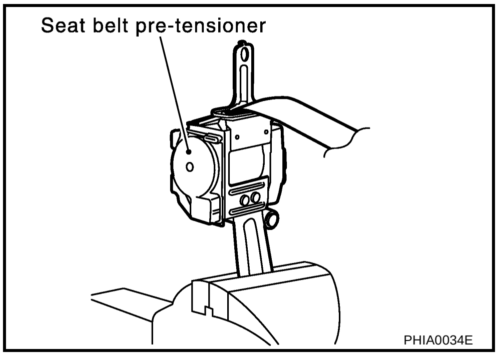
   CAUTION:

   When deploying the front side air bag module, stand at least 5 m (16 ft) away from the air bag module.

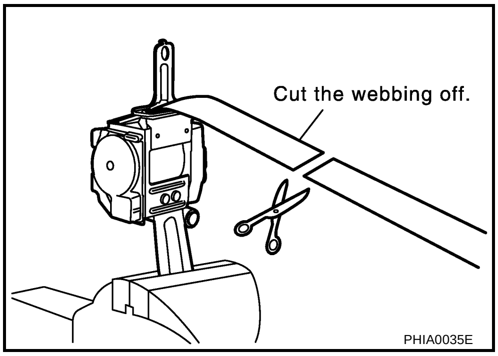


DEPLOYMENT PROCEDURES FOR SEAT BELT PRE-TENSIONER (OUTSIDE OF VEHICLE)

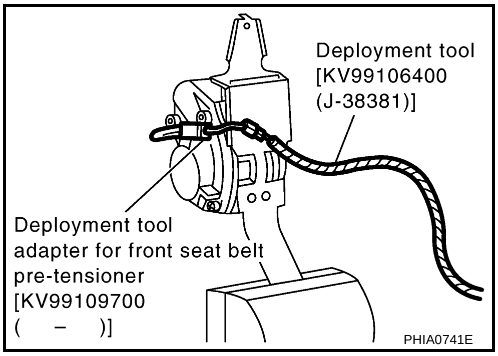
1. Firmly grip pre-tensioner in a vise.



2. Cut the webbing off.

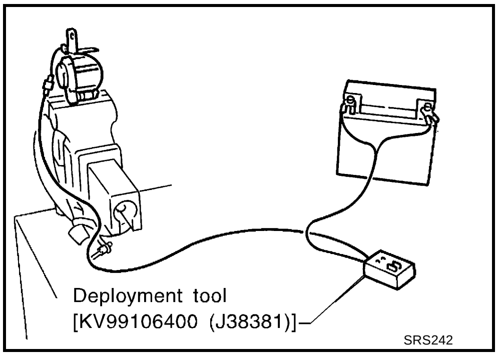


3. Connect deployment tool adapter [SST: KV99109700 (-   )] to deployment tool [SST: KV99106400 (J-38381)] connector and front seat belt pre-tensioner.



4. The lamp on the right side of the tool, marked “deployment tool power”, should glow green, not red.
5. Press the button on the deployment tool. The left side lamp on the tool, marked “seat belt pre-tensioner connector voltage”, will illuminate and the seat belt pre-tensioner will deploy.

   CAUTION:
   When deploying the front seat belt pre-tensioner, stand at least 5 m (16 ft) away from the seat belt pre-tensioner.



DEPLOYMENT OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER WHILE MOUNTED IN VEHICLE

When disposing of a vehicle, deploy air bag module and seat belt pre-tensioners while they are mounted in vehicle.

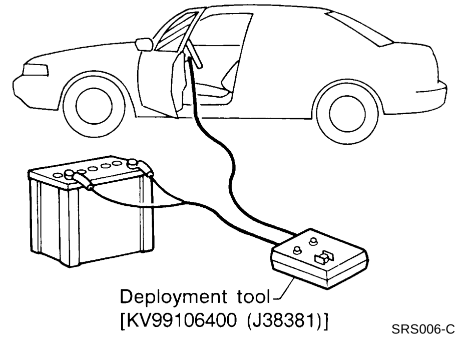
CAUTION:

When deploying air bag module or seat belt pre-tensioner, ensure vehicle is empty.

1. Disconnect both battery cables and wait 3 minutes.
2. Disconnect air bag module and seat belt pre-tensioner connector.
3. Connect deployment tool [SST: KV99106400 (J-38381)] to air bag module or seat belt pre-tensioner.
   For driver air bag module, attach deployment tool adapter [SST: KV99109700 (-)] to the tool connector.
   For front passenger air bag module, attach deployment tool adapter [SST:KV99108300 (J-38381-35)] to the tool connector.
   For side air bag module, attach deployment tool adapter [SST: KV99109000 (-)] to the tool connector.
   For seat belt pre-tensioner, attach deployment tool adapter [SST: KV99109700 (-)] to the tool connector.
4. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
5. The lamp on the right side of the tool, marked “deployment tool power”, should glow green, not red.
6. Press the button on the deployment tool. The left side lamp on the tool, marked “air bag connector voltage”, will illuminate and the air bag module or seat belt pre-tensioner will deploy.

   CAUTION:

   Activate only one air bag module or seat belt pre-tensioner at a time.



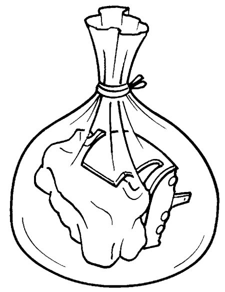
SRS006-C

DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

Deployed air bag module and seat belt pre-tensioner are very hot. Before disposing of air bag module and seat belt pre-tensioner, wait at least 30 minutes, and 10 minutes, respectively. Seal them in a plastic bag before disposal.

CAUTION:

- **Never apply water to a deployed air bag module and seat belt pre-tensioner.**
- **Be sure to wear gloves when handling a deployed air bag module and seat belt pre-tensioner.**
- **No poisonous gas is produced upon air bag module deployment. However, be careful not to inhale gas since it irritates throat and can cause choking.**
- **Do not attempt to disassemble air bag module and seat belt pre-tensioner.**
- **Air bag module and seat belt pre-tensioner cannot be reused.**
- **Wash your hands clean after finishing work.**


SBF276H

COLLISION DIAGNOSIS

PFP:00015

For Frontal Collision

AHS000R2

To repair the SRS, perform the following steps.

When SRS (except the front side air bag and side curtain air bag modules) is activated in a collision:

1. Replace the diagnosis sensor unit.
2. Remove the air bag modules (except the front side air bag modules and side curtain air bag modules), crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
3. Check the SRS components using the table below:
   - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
4. Install new air bag modules (except the front side air bag modules and side curtain air bag modules) crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
5. Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to SRS-15, "SRS Operation Check" for details. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

1. Check the SRS components using the table below:
   - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
2. Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to SRS-15, "SRS Operation Check" for details. Ensure entire SRS operates properly.

When only one front air bag module is activated in a collision:

1. Replace the following components:
   - Diagnosis sensor unit
   - Crash zone sensor
   - Activated front air bag and seat belt pre-tensioner.
2. Check the other SRS components using the table below. (Refer to “SRS is NOT activated”.)
   - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
3. Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to SRS-15, "SRS Operation Check" for details. Ensure entire SRS operates properly.

Only one front air bag may inflate a crash, depending on the crash severity and whether the front occupants are belted or unbelted. This does not indicate improper performance of the system. Perform self-diagnosis to make sure the entire SRS operates properly.

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	SRS is activated	SRS is NOT activated
Air bag module (driver or front passenger air bag module)	REPLACE Install with new bolts.	1. Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. – Install driver air bag module into the steering wheel to check fit and alignment with the wheel. – Install passenger air bag module into the instrument panel to check fit with the instrument panel. 3. No damage found, reinstall with new bolts. 4. If damaged—REPLACE. Install air bag modules with new special bolts Air bag must be deployed before discarding.
Seat belt pre-tensioner assembly	REPLACE Install seat belt pre-tensioner with new bolts.	1. Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. Check belts for damage and anchors for loose mounting. 3. Check retractor for smooth operation. 4. If no damage is found, reinstall seat belt pre-tensioner assembly. 5. If damaged—REPLACE. Install the seat belt pre-tensioners with new bolts. Seat belt pre-tensioners must be deployed before discarding.

Part	SRS is activated	SRS is NOT activated
Diagnosis sensor unit	REPLACE Install with new bolts.	1. Check case for dents, cracks or deformities. 2. Check connectors for damage, and terminals for deformities. 3. If no damage is found, reinstall with new bolts and ground bolt. 4. If damaged—REPLACE. Install diagnosis sensor unit with new bolts and ground bolt.
Steering wheel	1. Visually check steering wheel for deformities. 2. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities. 3. Install air bag module to check fit or alignment with steering wheel. 4. Check steering wheel for excessive free play. 5. If no damage is found, reinstall with bolts. 6. If damaged—REPLACE.	
Spiral cable	1. Visually check spiral cable and combination switch for damage. 2. Check connectors and protective tape for damage. 3. Check steering wheel for noise, binding or heavy operation. 4. If no damage is found, reinstall with bolts. 5. If damaged—REPLACE.	
Harness and Connectors	1. Check connectors for poor connection, damage, and terminals for deformities. 2. Check harness for binding, chafing, cuts, or deformities. 3. If no damage is found, reinstall the harness and connectors. 4. Damaged—REPLACE damaged section of harness. Do not attempt to repair, splice or modify any SRS harness.	
Instrument panel	1. Visually check instrumental panel for damage. 2. If no damage is found, reinstall the instrument panel. 3. If damaged—REPLACE the instrument panel with bolts.	

For Side Collision

AHS000R3

WHEN THE SIDE AIR BAG IS ACTIVATED IN THE SIDE COLLISION:

1. Replace the following component:
- All parts of front seatback (including front seatback frame) with front side air bag module (on the side on which front side air bag is activated)
- Diagnosis sensor unit
- Side air bag (Satellite) sensor
2. Check the SRS components and the related parts using the table shown below.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
3. Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to SRS-15, "SRS Operation Check" . Ensure entire SRS operation properly.

WHEN SRS IS NOT ACTIVATED IN THE SIDE COLLISION:

1. Check the SRS components and the related parts using the table shown below.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
2. Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to SRS-15, "SRS Operation Check" . Ensure entire SRS operation properly.

SRS INSPECTION (FOR SIDE COLLISION)

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated
Front LH or RH side air bag module	REPLACE all parts of seatback with deployed front side air bag module.	1. Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side. 2. If damaged—REPLACE the damaged seat parts with new bolts and remove the front side air bag module. 3. Check for visible signs of damaged (tears etc.) of the front LH or RH side air bag module. 4. Check harness and connectors for damage, and terminals for deformities. 5. If no damaged is found, reinstall the front LH or RH side air bag module with new nuts. 6. If damaged—REPLACE the front LH or RH side air bag module with new nut. Air bag must be deployed before disposing of it.
LH or RH side air bag (Satellite) sensor	REPLACE the side air bag (Satellite) sensor on the collision side with new nuts. (Repair the center pillar inner, etc. before installing new one if damaged.)	1. Remove the LH or RH side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding. 2. Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor. 3. Install the LH or RH side air bag (Satellite) sensor to check fit. 4. If no damage is found, reinstall the LH or RH side sir bag (Satellite) sensor with new nuts. 5. If damaged—REPLACE the LH or RH side air bag (Satellite) sensor with new nuts.
Diagnosis sensor unit	REPLACE the diagnosis sensor unit with the new bolts.	1. Check case and bracket for dents, cracks or deformities. 2. Check connectors for damage, and terminals for deformities. 3. If no damage is found, reinstall the diagnosis sensor unit with new bolts and ground bolt. 4. If damaged—REPLACE the diagnosis sensor unit with new bolts and ground bolt.
Seat belt pre-tensioner assembly	1. Check if the seat belt can be extended smoothly. If the seat belt cannot be extended smoothly, – Check for deformities of the center pillar inner. – If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly. 2. Remove the seat belt pre-tensioner assembly on the collision side. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 3. Check for visible signs of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly. 4. If no damage is found, reinstall the seat belt pre-tensioner assembly. 5. If damaged—REPLACE the seat belt pre-tensioner assembly with new bolts. The seat belt pre-tensioner assembly must be deployed before disposing of it.	
Seat with front side air bag	REPLACE all parts of front seatback (including front seatback frame)	1. Visually check the seat on the collision side. 2. Remove the seat on the collision side and check the following for damage and deformities. – Harness, connectors and terminals – Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) 3. If no damage is found, reinstall the seat. 4. If damaged—REPLACE the damaged seat parts with new bolts.
Center pillar inner	1. Check the center pillar inner on the collision side for damage (dents, cracks, deformation). 2. If damaged—REPAIR the center pillar inner.	
Trim	1. Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision side. 2. If damaged—REPLACE the damaged trim parts.	